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# Shrewsbury High School

Shrewsbury, Massachusetts

## Program of Studies

### 2009-2010



#### SHREWSBURY HIGH SCHOOL MISSION STATEMENT

*The Shrewsbury High School community provides challenging, diverse learning opportunities, promotes creativity and independent thinking and empowers students to become capable, caring, and active contributors to the world in which they live.*

Shrewsbury High School  
64 Holden Street  
Shrewsbury, Massachusetts 01545

*Approved by the Shrewsbury School Committee on January 7, 2009*

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**Shrewsbury High School**  
**64 Holden Street**  
**Shrewsbury, Massachusetts**  
**508 841-8800**

*Message from the Principal*

Dear Students and Parents:

I am pleased to present the 2009-2010 *Shrewsbury High School Program of Studies*. Choosing a challenging and appropriate course of study is a very important piece of your high school experience. As you will see, Shrewsbury High School has a wide variety of courses for you to select from. While many are required for graduation, there are electives that you may select based on personal interest and future goals. Please take the time to review this booklet and then seek additional information and clarification from your teachers, counselors and department directors.

The academic and elective programs at Shrewsbury High School have been carefully developed to integrate the *Massachusetts Curriculum Frameworks*, which the *Massachusetts Comprehensive Assessment System (MCAS)* is built on. This is particularly important, as all students must pass the MCAS in addition to completing all Shrewsbury High School course requirements to earn a diploma. You will also notice that all courses reflect our *Expectations for Student Learning*, which you will find on page 4 of this book. These *Expectations*, which are divided into three categories: academic, civic and social, outline what we expect every Shrewsbury High School student to be able to demonstrate by the time they graduate.

We look forward to working with you as you plan your future at Shrewsbury High School and beyond. If you consider your selections carefully and challenge yourself appropriately your high school experience will be both rewarding and memorable.

Sincerely,

Brian K. Reagan  
Principal

## **SHREWSBURY HIGH SCHOOL MISSION STATEMENT**

The Shrewsbury High School community provides challenging, diverse learning opportunities, promotes creativity and independent thinking and empowers students to become capable, caring, and active contributors to the world in which they live.

### **Expectations for Student Learning**

#### **Academic Expectations**

Students at Shrewsbury High School will:

1. Apply critical thinking and creative literacy skills to formulate and express opinions in a variety of ways.
2. Demonstrate mathematical and scientific literacy while using problem solving and reasoning skills.
3. Exhibit effective speaking, writing and reading skills.
4. Demonstrate an appropriate and varied use of information literacy and technology skills.
5. Develop and maintain positive health and fitness habits.
6. Demonstrate a practical knowledge of the fine and/or performing arts.

#### **Social Expectations**

Students at Shrewsbury High School will:

7. Participate in collaborative and cooperative learning.
8. Demonstrate self-discipline and personal responsibility for learning.
9. Show respect for individual abilities and diverse cultures.

#### **Civic Expectations**

Students at Shrewsbury High School will:

10. Demonstrate the rights and responsibilities of citizens in a democratic society.
11. Exhibit a commitment to community involvement.

## Shrewsbury Public Schools Statement of Non-Discrimination

Shrewsbury Public Schools are required by the Massachusetts Department of Education to publish an annual statement of non-discrimination. This notice serves to meet that requirement.

The Massachusetts Equal Educational Opportunity statute, General Laws Chapter 76, § 5, ensures that all students have the right to equal educational opportunities in the public schools. The Shrewsbury Public School District is committed to ensuring equal educational opportunities for all students, and does not discriminate on the basis of race, color, sex, religion, national origin, sexual orientation or disability.

The Shrewsbury Public Schools are in compliance with state and federal laws prohibiting discrimination and harassment. The following laws apply:

**Massachusetts General Law Chapter 76, § 5**, which states, "No person shall be excluded from or discriminated against in the admission to a public school or in obtaining the advantages, privileges, and course of study of such public school on account of race, color, sex, religion, national origin or sexual orientation."

**Title IX of the Educational Amendments of 1972**, is a federal statute which states, in part, "No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program receiving federal assistance." This requirement not to discriminate in educational programs and activities also extends to employment. Mr. Thomas M. Kennedy is the Title IX Coordinator and Director of Human Resources and he can be reached at (508) 841-8400.

**Title VI of the Civil Rights Act of 1964**, provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance. Title VI provides for equal access and prohibits discrimination in the assignment of students to classes. It also prohibits discrimination in ability grouping or tracking students.

The Shrewsbury School Committee's Policies #316 and #645 deal directly with the issues of harassment. Copies of these policies are available in the principal's office at each school or through the Superintendent's Office, located at 100 Maple Avenue, Shrewsbury, MA 01545. Further information may be obtained by contacting Mr. Thomas M. Kennedy, Director of Human Resources at (508) 841-8400.

The following grievance procedure which was approved by the Shrewsbury School Committee, is to be used for all issues relating to harassment or discrimination involving students and/or staff:

- The Shrewsbury Public Schools does not and will not knowingly discriminate against any student or employee on the basis of race, color, sex, religion, national origin, sexual orientation or disability. All reports of harassment or discrimination will be taken seriously and investigated in a timely fashion. Reports will be held in the utmost confidence.
- Any individual who believes he/she has been the subject of harassment or discrimination should immediately report the incident, either verbally or in writing to an administrator, adjustment counselor, guidance counselor, or teacher. The principal must be notified in all cases of harassment or discrimination. All cases of harassment involving a staff member will be reported to the Director of Human Resources.
  - An administrator will first meet with the parties involved in an attempt to resolve the issue informally.

- If the complainant is unable to meet with the alleged harasser, the administrator, teacher, or counselor may assist the complainant in drafting a letter clearly describing the incident (behavior, where and when it occurred), how the complainant felt, and a request that the behavior stop immediately.
  - Any letter should be signed by the complainant, sent to the alleged harasser and be kept on file by the school administrator.
  - The alleged harasser may be encouraged to apologize, personally or by letter or to write a letter refuting the allegations.
- In cases of alleged harassment requiring formal investigations, the following shall be implemented.
  - The complainant shall have the support of a staff member of his/her choice and the alleged harasser will also have the opportunity to select representation (union representative, attorney, teacher, etc). An administrator from the appropriate level will complete an investigation promptly and make a decision regarding the allegations.
- In serious cases where alleged harassment does not stop following a warning, appropriate disciplinary sanction may be imposed, up to and including suspension or dismissal.
  - If the conduct violates the law the incident will be reported to the appropriate authorities by the school administration.
  - Retaliation or threats of retaliation are unlawful and will not be tolerated.
  - In all cases of harassment or discrimination the investigating administrator will make a final disposition and issue a written report, which will be maintained in the school's files.
- If the complainant cannot utilize the procedure detailed above because the alleged harasser is involved in the procedure, the complainant should contact the Superintendent of Schools. Complaints about the Superintendent of Schools should be made to the Chairperson of the School Committee.

**Section 504 of the Rehabilitation Act of 1973** is a federal statute which states, in part, "No otherwise qualified individual, shall solely on the basis of handicap, be excluded from participation in, be denied benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance." This requirement not to discriminate in educational programs and activities also extends to employment. Each school has a designated Section 504 Coordinator. Initial inquiries relating to Section 504 should be directed to the building-based Section 504 Coordinator who can be contacted through the principal's office. Further information may be requested by contacting the Superintendent's office at (508) 841-8400.

The following grievance procedure should be used to report discrimination under Section 504 of the Rehabilitation Acts of 1973:

- To fulfill its obligation under Section 504, the Shrewsbury Public Schools recognizes a responsibility to avoid discrimination in policies and practices regarding personnel and students. No discrimination against a person with a disability will knowingly be permitted in any of the programs or activities of the Shrewsbury Public Schools.
- The school district has a specific requirement under the Rehabilitation Act of 1973, which includes the responsibility to identify, evaluate and if the child is determined to be eligible under Section 504, to afford access to free and appropriate educational services. Questions about eligibility or services should be first directed to the building-based coordinator.
- If a parent or guardian disagrees with the determination made by the professional staff of the school, he/she has a right to a hearing, first with the district's Section 504 Coordinator, and secondly with an impartial hearing officer. The district's Section 504 Coordinator can be reached at 100 Maple Avenue, Shrewsbury, MA 01545 or by phone at (508) 841-8400.
- All grievances will be heard in a timely manner by the district's Section 504 Coordinator, who will provide a written report of the district's findings. If a parent or guardian is unsatisfied with the results of the review they may appeal to the Superintendent of Schools.
- For grievances not resolved at the Superintendent's level, a review by an impartial hearing officer may be scheduled.

Individuals with grievances are not required to use the Shrewsbury Public School's grievance procedure. Written complaints may be filed with the following agencies:

Massachusetts Department of Education  
350 Main Street  
Malden, MA 02148-5023 (781) 338-3000

United States Department of Education  
Region 1 – Office of Civil Rights  
John W. McCormack Post Office and Courthouse – Room 222  
Boston, MA 02109-4557 (617) 223-9662

Equal Employment Opportunity Commission  
One Congress Street  
Boston, MA 02114 (617) 565-3200

Massachusetts Commission Against Discrimination  
One Ashburton Place, Room 601  
Boston, MA 02108 (617) 727-3990

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## General Information

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### Demographic Profile

Shrewsbury is principally a residential town with a population of 33,000; however, there is a significant amount of industry and business in the community. The public school system includes a pre-school, an early childhood center, four elementary schools, two middle schools (grades 5/ 6 and 7/8) and one high school (grades 9 through 12). Shrewsbury is located in central Massachusetts, five miles east of Worcester and thirty-five miles west of Boston. Shrewsbury High is a four-year comprehensive high school housing approximately 1640 students. The school is accredited by the New England Association of Schools and Colleges.

### How to Plan a Program

Planning an educational program is an ongoing process and should involve as many people as possible, including the student, parents, teachers and guidance counselors. Course selection marks the beginning of responsible decision-making for many students. Parents should be involved in giving both help and direction as a student works through his/her decision. A major part of the process of course selection involves the gathering of information. Classroom teachers and guidance counselors are valuable resources at this stage.

The Program of Studies has been prepared with YOU in mind. Read it first to obtain information on the entire high school curriculum and then read the booklet a second time, more carefully, to obtain specific information on those courses which are either required for next year or those in which you have a particular interest and will elect.

The classroom teacher has in-depth knowledge of the content of various courses taught within his/her department. In addition, he/she is usually aware of the level of expectation within each course. Knowing you as a student and the kind of work of which you are capable, your teacher can make valid recommendations as to which courses to take within the department.

The guidance counselor has a broad overview of the entire curriculum. Besides having a strong sense of the student's performance and ability level, the counselor is very much aware of courses necessary to fulfill graduation requirements. The guidance counselor also is able to provide good advice about the kind of program and courses which will be helpful as you prepare yourself to pursue post-high school plans, whether these be a four or two year college, a technical school or immediate entry into the world of work. A student conference can be arranged by coming to the guidance office to make an appointment. A parent-counselor conference can be arranged by calling the school at 508-841-8813. Final placement can be discussed with the appropriate counselor and the Department Director. **Not all student choices can be accommodated within scheduling constraints and school placement policies. Final decisions on placement will be made by the principal.**

### Graduation Requirements

To graduate from Shrewsbury High School, a student must have completed a minimum of 105 credits. A semester of work in a course that meets daily equals 2.5 credits. A full year's work in a course earns 5 credits. The minimum graduation requirements are as follows:

20 credits	English
15 credits	Social Sciences
15 credits	Math
15 credits	Science
15 credits	Health/Physical Education
2.5 credits	Fine or Performing Arts
22.5 credits	Electives

Additionally, students must pass the Massachusetts Comprehensive Assessment System (MCAS) in order to qualify for graduation.



Within the stated credits, students must take the following courses:

Grade 9	Grade 10	Grade 11	Grade 12
English 9	English 10	English 11	English 12
World Civilizations	American History	American Studies	Social Sciences (1 sem.)
Physical Education	Physical Education	Physical Education	Physical Education
Health Education		Health Education	

### Promotion Policy

In order to continue with the class, students must earn the following credits:

To be considered a <b>sophomore</b>	Student must earn <b>21</b> credits
To be considered a <b>junior</b>	Student must earn <b>45</b> credits
To be considered a <b>senior</b>	Student must earn <b>73</b> credits

Students repeating freshman year may be promoted to the sophomore year at the end of the first semester if they have earned 33 credits. Those students repeating sophomore year may be promoted to the junior year at the end of the first semester if they have earned 59 credits. Students repeating junior year may be promoted to the senior year by earning 89 credits by the end of the first semester.

To discuss course offerings and the selection process, please make an appointment with your guidance counselor:

Nicholas DiPilato, Director	508-841-8824	Email: <a href="mailto:ndipilato@shrewsbury.k12.ma.us">ndipilato@shrewsbury.k12.ma.us</a>
Kathy Floyd	508-841-8818	Email: <a href="mailto:kfloyd@shrewsbury.k12.ma.us">kfloyd@shrewsbury.k12.ma.us</a>
Jammie Lussier	508-841-8827	Email: <a href="mailto:jlussier@shrewsbury.k12.ma.us">jlussier@shrewsbury.k12.ma.us</a>
Susan McGuirk	508-841-8830	Email: <a href="mailto:smcguirk@shrewsbury.k12.ma.us">smcguirk@shrewsbury.k12.ma.us</a>
Gerald O'Connell	508-841-8852	Email: <a href="mailto:goconnell@shrewsbury.k12.ma.us">goconnell@shrewsbury.k12.ma.us</a>
Judith O'Connor	508-841-8829	Email: <a href="mailto:joconnor@shrewsbury.k12.ma.us">joconnor@shrewsbury.k12.ma.us</a>
Jessica Reagey	508-841-8834	Email: <a href="mailto:jreagey@shrewsbury.k12.ma.us">jreagey@shrewsbury.k12.ma.us</a>

### Course Levels

All placements are designed to provide maximum intellectual challenge for each student. The school makes placement decisions on the basis of aptitude as determined by standardized testing, past academic performance, and teacher recommendations. Placement assumes that ability will allow success, but normal student effort is also assumed; low grades are not automatically a basis for dropping levels. It is also assumed that students and teachers will anticipate upward movements in level placements based upon intellectual growth over years of schooling. Placement levels may vary in different subject areas.

#### Advanced Placement (AP):

AP courses prepare students for CEEB Advanced Placement Credit. Courses are designed for maximum challenge of the most intellectually curious students. Very substantial initiative and independent work is the norm. Students are expected to take the AP examination.

#### Honors:

Where Advanced Placement is not available, honors is the highest level in intellectual challenge. Substantial initiative and independent work is the norm.

#### A Level:

The largest grouping of students in the high school is A Level. Courses require a moderate to extensive intellectual development and outside preparation. These courses are designed to prepare students for college and the world of work.

## **Tutoring Services**

Peer tutoring is one of the most effective ways for students who need extra help in a subject. Peer tutors are National Honor Society members or students in grades 10-12 who have been recommended by their teachers. Tutoring sessions take place in departmental areas during the student's study period; tutoring continues for as long as needed. Students are referred by a teacher, counselor, administrator, or parents. Please contact the guidance office for more information about the program.

## **Class Rank/Percentile**

An official class rank is determined at the end of Grade 11 and at the end of the first and second semesters of Grade 12. Class rank is calculated from the total number of quality points a student earns. Quality points are determined by the grades received in the course taken and the level of the courses. Class rank is reported in deciles.

Course Levels / Quality Points			
Grade	AP	Honors	A-Level
A+	5.7	5.2	4.7
A	5.3	4.8	4.3
A-	5.0	4.5	4.0
B+	4.7	4.2	3.7
B	4.3	3.8	3.3
B-	4.0	3.5	3.0
C+	3.7	3.2	2.7
C	3.3	2.8	2.3
C-	3.0	2.5	2.0
D+	2.7	2.2	1.7
D	2.3	1.5	1.3
D-	2.0	1.5	1.0
F	0	0	0

The semester grade is an average of the two term grades added to the semester exam. The weight of the semester exam may range from 10% to 25% of the semester grade.

## **Course Commitment**

Allocation of staff, rooms and the number of sections offered are determined by the number of student requests received for a specific course; therefore students selecting full year courses are committed to remain in the course for the entire year. Exceptions are permitted under certain circumstances. Also students selecting semester courses are committed to remain in these courses for the semester scheduled.

## **Recommended Program**

The "best" schedule is the one that includes a comprehensive educational plan linked with career awareness and exploration. SHS offers students applied academic courses, work place and school-based learning, occupational and technical courses, field trips and internships. Our curriculum will effectively prepare students to live and work in a highly technical society through meaningful educational and career preparation.

## **College Preparatory Program**

As suggested earlier, guidance counselors can provide sound advice about an appropriate college preparatory program. Generally speaking, students should enroll for the most rigorous level of classes that they can handle. Each year students should be taking "major" courses in the liberal arts: English, mathematics, languages, social studies and science. In addition to these solid academic courses, students should also take the opportunity to broaden their scope and satisfy their interests by taking electives in the areas of family and consumer science, art, music, technology education and instructional technologies.

**College preparatory academic courses should include:**

- English: courses in composition and literature that will include the development of reading, writing and comprehension skills.
- Mathematics: courses in algebra, geometry, advanced math. Students considering a major in math, science or engineering should consider a fourth year of math, including calculus.
- Science: courses in biology, chemistry or physics.
- History/Social Sciences: challenging advanced electives in human and social development.
- Foreign Language: two to three years of the same foreign language are the minimum language requirements. More are strongly recommended. Highly selective colleges look favorably upon four or five years.
- Related Electives: to broaden the depth and scope of student's educational background. Examples of these courses include child development, art, music, technical education, T.V. or computers.

**Two-Year Technical/Junior/Community College**

Students planning post-high school education at a two-year college should follow the same prescribed program as for the four-year college.

**School-to-Career**

Students planning to join the work force full-time immediately upon high school graduation, in an entry-level position, should plan their high school program not only to satisfy graduation requirements, but also to take advantage of courses that will provide marketable work-based competencies.

Courses from family and consumer science, technology education, instructional technologies, music and art departments are strongly recommended. Students should also consider enrolling in the Jobs for Bay State Graduates Program or the School-to-Career Project.

**Computer Access**

Shrewsbury High School embraces fully the guiding principle that technology enhances teaching and learning. In support of this belief, SHS has increased classroom access to technology and maintains several computing areas. Access can be found in the media center, computer labs and teachers have access to department laptop carts. These labs are scheduled by teachers and/or departments in order to teach entire classes a particular application or to hold workshops. Daily after school access is available in the computer labs until 2:30 p.m. and in the media center until 3:00 p.m. Additionally, we provide first floor computer lab access to students Tuesdays and Thursdays from 7:00 - 9:00 p.m.

**Adjustment Counselors**

Adjustment Counseling Services are available to all students in order to help them cope better with personal issues that may jeopardize healthy adolescent development. Students may make appointments directly with the adjustment counselor or through school administrators, teachers, school nurse, parents or guidance staff.

**Adjustment Counselors:**

Dr. Beth Neiman - 841-8800 x2025

Dr. Marc Spisto - 841-8850

**Student Services**

Guidance Counseling services, in both individual or group settings, are available for every student in the school. These services include:

- assistance with educational planning
- interpretation of test scores
- school-to-career information and preparation
- study help
- help with home, school and/or social concerns

### **Special Education Services**

The special education program at Shrewsbury High School is designed to serve students in grades 9-12 and individuals to age 22. Students may be referred for evaluation by a teacher, parent, social worker, and/or family physician. Placement in special education programs is determined by the special education TEAM that may include the parents, student, regular and special education teachers and other individuals as needed. For further information regarding procedures and programs, please contact: Interim Special Education Department Director, Kelli McSweeney at 508- 841-8828.

### **Library Media Services**

The Library Media Program at Shrewsbury High School provides experiences which help students become independent, self-sufficient learners and researchers by offering instruction and guidance in the use of our extensive reference collection, both in print and electronic media. The program also fosters an enjoyment of literature and an appreciation of varied literary genre.

Research activities are embedded into the curriculum where the media specialist and the teacher work collaboratively to assist the students. Students also visit the media center during directed study periods to work independently or in small groups. The media center and multimedia function presentation room are available for students' daily use. The Media Center is open daily until 3:00 p.m.

#### **Media Center Staff:**

Claire Donovan, Media Specialist 508-841-8821

Dawn Vigliatura, Media Assistant

### **School Nurses**

The school nurses strengthen and facilitate the educational process by improving and protecting the health of children. The major focus of school nursing services is the prevention of illness and disability, and the early detection and correction of health problems.

#### **School Nurses:**

Judy DeFalco 508-841-8822

Pam Johnson 508-841-8768

## **Information on Health and Sexuality Education**

There are a variety of courses offered at Shrewsbury High School that include information with reference to sexuality and human growth and development. These programs have been developed by our professional staff and endorsed by the Health Education Advisory Council. The overall goal is to promote the health and well being of our students, and to help them make wise and informed decisions during their teenage years and beyond.

Sexuality education is a component within the Health, Science, Social Studies, and Family and Consumer Science Departments. Topics such as puberty; dating; relationships and communication skills; pregnancy; birth control; abortion; sexual orientation; prevention of HIV / AIDS and other sexually transmitted diseases; and prevention of sexual abuse are included. The specific courses that include these topics are listed below. Parents are welcome to review the materials for these curricula. Please contact the appropriate department director to arrange a convenient time and location.

During the instruction, students will be able to ask questions, which will be answered factually and in an age-appropriate manner. Each student's privacy will be respected, and no one will be put on the spot to ask or answer questions or reveal personal information. Material will be presented in a balanced, factual way that makes clear that people may have strong religious and moral beliefs about issues such as birth control and abortion, and that these beliefs must be respected.

Under Massachusetts law MA G.L. C. 71 §32A and School Committee policy, a parent may exempt a child from any portion of the curriculum that primarily involves human sexual education or human sexuality issues. To receive exemption, simply send a letter requesting an exemption for your child to the principal. No student who is exempted from this portion of the curriculum will be penalized. The school will provide an alternative assignment to students who are exempted.

Courses including sexuality education and human sexuality issues are as follows:

Health Education	Human Reproduction; Conception; Contraception; Sexually Transmitted Diseases; HIV / AIDS; Sexual Orientation; Relationships; Abuse
Bioethics	Introduction to Bioethics; Population Control and Birth Control; Abortion; HIV / AIDS
Biology (All levels)	Human Reproduction
Psychology	Development; Motivation (four main areas sexuality, hunger, achievement and the need to belong)
AP Psychology	Biological Bases of Behavior; Motivation and Emotion; Physical and Cognitive Development; Social Development; Social Psychology; Psychological Disorders
Child Development	Teen Pregnancy and Parenthood; Prenatal Development; Preparing for Birth; The Baby's Arrival; Special Challenges for Children; Understanding the Behaviors of Children
Early Childhood Ed.	Guiding Children's Safety; Understanding Four and Five - Year - Olds; Guiding Storytelling Experiences

## Special Programs

Shrewsbury High School is a comprehensive public high school and as such its curricular offerings are designed to meet the needs of most students. There are times, however, when a student needs special programs or courses. Shrewsbury High School has several programs that may meet the needs of these students. For more specific information, it is important that students discuss these options with their guidance counselors to find out about enrolling in these special programs.

### Course Offerings:

School-Career Project	Senior Exhibition
Academic Support	Jobs for Bay State Graduates
Independent Study	Accounting
ELE (English Language Education)	Virtual High School

### School-to-Career Project

Elective Semester or Full Year Grade (s): 12 A Level

Prerequisite: Enrollment in JBSG or permission of senior administrator.

This project provides an opportunity for students to earn credit by applying academic skills to workplace experience. Students are expected to be employed after school a minimum of three days per week. Portfolio development and evaluations on the job will be part of the process. Student may elect to participate in the project for 2.5 credits (one semester) or 5 credits (full year).

### Academic Support

Grade (s): 9-12

Prerequisite: Permission of Instructor

Academic Support is a supportive academic environment with a group counseling component designed to assist students to succeed in a regular education program while learning to cope with the stresses of adolescence. Specific strategies are developed for organizational skills, study skills and expectations of the academic classroom and teachers. The goal of this program is to develop the necessary skills for continued achievement in high school. This course meets four days per cycle.

### Independent Study

Grade (s): 9-12

Prerequisite: See your Guidance Counselor

If there is a need, an independent study can often be worked out among the student, the teacher, the parent, and the counselor. These situations will be treated on an individual basis and must be requested early in the school year. Independent Study requires a written agreement between student, teacher, and department director at the start of the year, specifying meeting times and places, work products, evaluation, and credit.

### ELE (English Language Education)

Elective Full Year Grade (s): 9 - 12 A Level

Prerequisite: None

The English Language Education (ELE) program is designed for students whose native language is other than English. Students will receive instruction according to their English language proficiency level in listening, speaking, reading and writing. Classes designed for English language learners include ELE American History and ELE English. This program will also provide support for all high school subject areas.

## **Jobs for Bay State Graduates**

Elective      Full Year      Grade (s): 12

Prerequisite: Permission of Instructor

Jobs for Bay State Graduates (JBSG), a unique program operating at Shrewsbury High School, provides guidance in job preparation and placement. The course is for seniors who are either college bound or planning to enter the world of work. The course offers two credits per semester. Students attend classes four times a cycle.

## **Senior Exhibition**

Elective      Semester or Full Year      Grade (s): 12      Honors or A Level

Prerequisite: Permission from coordinator

The intent of this program is to allow a selected number of graduating seniors the opportunity to demonstrate their skills as independent learners by becoming involved in an area of personal interest. The graduation exhibition will be evidence of a student's ability to problem solve, organize time and resources, communicate effectively and reflect on oneself as a learner. Students will be required to demonstrate competence through the creation of a portfolio, exhibition, and reflective essay. A faculty mentor will be assigned to each student. Students must apply in May of junior year to be considered for this program.

## **Accounting**

Elective      Full Year      Grade (s): 12      A Level

This course stresses the basic principles necessary for an intelligent understanding of the books and records used in business: debits and credits; opening and closing books; classification and analysis of accounts; controlling accounts; trial balance; working papers, and the preparation of financial statements. As concepts are learned, students will use a computer application that provides the opportunity to use automated accounting software to record their work. This course cannot be used to fulfill the three year graduation requirement in Mathematics.

## **Virtual High School**

Elective      Full Year      Grade (s): 11-12      Honors

Prerequisite: Permission from coordinator

The Virtual High School is a national program for delivering high caliber (many courses are for honor credit), nontraditional curriculum over the Internet. At Shrewsbury High school, a predetermined number of students may choose exciting courses from a very diverse catalog, developed by specially trained teachers from across the nation. VHS participants should be students who are motivated to use cutting-edge information technology, can budget their time effectively, enjoy working independently, and have some pioneer spirit. This program can offer some flexibility to students who, due to scheduling conflicts, cannot take a course to receive credits required for graduation. For electives, students will find unique courses in the catalog, taught by teachers with special interests. Students will be scheduled for computer access time during the day for VHS course work or they may work at home. Check out Virtual High School by visiting the web site at: [www.govhs.org](http://www.govhs.org). Follow the academic link to the course catalog and a demo net course.

**English Department**  
Mr. Jamie Vitonis, Director 508-841-8831  
Email: [jvitonis@shrewsbury.k12.ma.us](mailto:jvitonis@shrewsbury.k12.ma.us)

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The English program is designed to meet students' individual needs and to help them acquire effective communication skills. Students are enrolled in an English class each year and must successfully complete four years in order to meet graduation requirements. Each year's course offering builds upon skills acquired during previous years. Listening, reading, speaking, thinking, and writing skills are emphasized each year; and students are challenged to support their opinions with specific details from their reading and observations. Students in grade 9 are given instruction in speech fundamentals as part of one quarter of their assigned English class. Creative Writing is an elective, which provides enrichment in the written word and the opportunity to be creative using the written word. There are three levels of English at each grade level. Students are placed at a level most appropriate for them based on teacher recommendation, past and present academic performance, standardized test scores, and future goals.

Components of the English Language Arts Content Standards begin with the Core Concept that "Lifelong learners engage in constructing and conveying meaning by assessing, analyzing, evaluating and applying knowledge and experiences for a variety of purposes, audiences, and situations."

The Six Strands of the ELA Framework that describe the content and skills students learn in English Language Arts throughout their schooling are apparent in Shrewsbury High School's English curriculum. Some highlighted examples at each grade level include the speech component in grade nine which provides opportunities for students to create well-organized, succinct, timed speeches of various types and to engage productively in discussions as listeners and speakers; the multi-cultural literature studied in grades nine and ten which expands students' perspectives and develops in them an appreciation of themselves and of others; the opportunity for interdisciplinary study of American literature and history in grade eleven which gives students time to speculate on connections and relationships as well as analyze recurrent themes and patterns; and the research unit in grade twelve which allows students to access information through a variety of print and electronic media and to design and produce research papers that successfully communicate.

**Course Offerings:**

English 9	Advanced Placement English Literature
English 10	Creative Writing
English 11/ American Studies	Journalism
Advanced Placement English (Language)	Advanced Journalism
English 12	Freshman/Sophomore Seminar

**English 9**

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Required      Full Year      Grade: 9      A, B, and Honors

Prerequisite: Past academic performance and teacher recommendation

Ninth grade English is a college-bound level course in which students read, discuss, and write about various literary genres, including such works as Shakespeare's *Romeo and Juliet* and Cisneros' *The House on Mango Street*. Students complete a mythology unit; study ten to fifteen new vocabulary words per week; and in grammar, focus on parts of speech, parts of a sentence, and phrases. Writing encompasses the open response question and the five-paragraph essay. There is an emphasis on providing apt textual references to support ideas in both writing and discussion. A portion of one quarter of the year is spent on a communication unit that emphasizes both speaking and listening skills. Honors level students produce a lengthy biography assignment. All ninth grade students participate in a Performance Assessment at the end of the second semester.



## English 10

Meets Expectations for Student Learning: 1,3,4,7,8,9

Required Full Year Grade: 10 A, B, and Honors

Prerequisite: Past academic performance and teacher recommendation

Tenth grade English is a college-bound level course which reviews and strengthens previously acquired language skills while introducing more sophisticated concepts. Students analyze the elements of fiction in such works as Shakespeare's *Julius Caesar*, and Lee's *To Kill a Mockingbird*. The study of multicultural literature continues with numerous poems and nonfiction pieces in the reading anthology. Extensive work on writing effective responses to open response questions continues, and there is an emphasis on framing and writing long compositions, which include specific references to literature students have already read. Vocabulary units require cumulative quizzes, and the focus in grammar is on the clause and intensive study of mechanics. Honors level students produce a "controlled" research paper. Writing for all students focuses on diction (effective, appropriate, rich vocabulary), coherency, organization, and providing thoughtful commentary about textual evidence.

## English 11 / American Studies

Meets Expectations for Student Learning: 1,3,4,7,8,9

Required Full Year Grade: 11 Honors or A Level

Prerequisite: Past academic performance and teacher recommendation

American Studies combines all of the traditional aspects of eleventh grade English and U. S. History, but emphasizes the relationship between the two courses by studying them together with two teachers. In this way the underlying concept of man and history that has formed a uniquely diverse but common American heritage can be explored by showing the relationship among our literary, cultural, artistic, philosophical, and scientific traditions. The correlation between literature and history will be emphasized. Each student will learn the techniques of doing research using both traditional and technological methods and will produce several short research papers and projects. Students will develop skills in critical reading, vocabulary development, and writing skills including the argumentative essay as they prepare for the SAT I exam in May.

## Advanced Placement English (Language)

Meets Expectations for Student Learning: 1,3,4,7,8,9

Required Full Year Grade: 11 Advanced Placement

Prerequisite: Teacher recommendation; past academic performance; PSAT score in Critical Reading and in Writing; successful completion of summer reading/work.

Advanced Placement Language and Composition (11th grade) is a college-level course in effective writing and critical reading. Writing skills are analyzed in a systematic way by studying a variety of prose. Students assess prose writing by examining an author's use of diction, syntax, tone, structure, purpose, and meaning. Attention will be centered on developing a personal rhetorical style that cultivates strong persuasive writing skills. Students will analyze writings through close reading drills, and the lessons learned will be transferred to their own writing. Emphasis will be focused on knowing how to select and use appropriate modes of writing. This course will use the American literature course as a base; however, it will require more reading and focused writing than honor's level English. Additional summer reading is required. Students are expected to take the Advanced Placement Exam in May.

## English 12

Meets Expectations for Student Learning: 1,3,4,7,8,9

Required Full Year Grade: 12 Honors or A Level

Prerequisite: Past academic performance and teacher recommendation

Twelfth grade English is a college-bound level course that focuses on British and World Literature in the first semester. It will include the reading analysis of either Shakespeare's *Macbeth* or *Hamlet*, among other typically anthologized works. The interpretive aspects of symbolism, theme, figurative language, and style are emphasized. In writing, students produce progressively longer and more sophisticated expository writing, with explicit instruction around

transitions, tone, and rhetorical strategies such as repetition, understatement, and syntactical variation. College application essays are also stressed during this first semester. The twenty-five minute essay, sentence corrections, and error identifications, are practiced in preparation for the SAT. Vocabulary study continues, and the study of grammar culminates with a unit on usage. During the second semester, the literature focus will shift from British/World Literature to a more specific focus of a student's choosing. In addition, research skills are reviewed and a substantial research paper is produced. A summary of these "focused" literary offerings follows:

- **Art and Literature:** Students will study an overview of modern literature, discovering links between works of fiction and non-fiction with significant movements in modern art, as manifested in the various media of painting, photography, sculpture, film, and more. Samplings of renaissance art, surrealism, post-impressionism and primitivism, cubism, expressionism, Asian art, and pop art will be analyzed in light of the major works of Shakespeare's *Othello*, Hemingway's *A Farewell To Arms*, Hesse's *Siddhartha*, and other shorter pieces.
- **Masks of the Drama:** In this course, students will read and analyze a number of plays from the breadth of drama throughout the centuries. Students will also engage in low-risk acting activities, such as role-playing and acting out key scenes, designed to break down inhibitions and to develop a sense of trust within the group as we explore the drama. Some of the playwrights examined may include Sophocles, Shakespeare, Moliere, Wilde, and Ibsen.
- **Romanticism and Gothic Literature:** In this course, students will read several pieces of gothic literature including Shelley's *Frankenstein*, Stoker's *Dracula*, and others. Students will explore Romanticism as a literary and artistic movement and how this movement applies to the gothic literature. Students will discuss how authors use characterization, language, and theme to address the fear of the unknown, the supernatural, and scientific discovery.
- **Philosophy and Literature:** In this course, students will read, discuss, and analyze literature from the perspective of a philosopher: searching for insights into the nature of truth, reality, and the human condition. Students will examine the ideas of influential philosophers and try to apply them to fictional works. Some of the works examined will be Shelley's *Frankenstein*, Sartre's *No Exit*, and Kafka's *Metamorphosis*.
- **Social Issues in World Literature:** This course uses literature of the Middle East, the Far East, South America, and Africa to discuss relevant social issues currently affecting regions or areas of the world as well as issues in the recent past that still plague particular nations. Topics to be addressed will include gender in Middle Eastern society and Apartheid. Also, the course will explore government, propaganda, and how the two shape worldviews. Students will read, discuss, and write about various works of literature including *Persepolis* by Marjane Satrapi, *Kaffir Boy* by Mark Mathabane, *In The Time of Butterflies* by Julia Alvarez, and *The Kite Runner* by Khaled Hosseini.
- **Women's Literature:** This course focuses on literature written by women and about women's issues. Students will read Chopin's *The Awakening*, Morrison's *Beloved*, Atwood's *The Handmaid's Tale*, and Gillman's *The Yellow Wallpaper* among others. Students will analyze the symbolism, figurative language, and style of the literature, while exploring the themes of freedom and self-actualization, societal expectations for women, racism and sexism, and others. Class discussions, creative writing pieces, and a research paper will provide students with opportunities to investigate a variety of perspectives on gender.

## Advanced Placement English (Literature)

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Required      Full Year      Grade: 12      Advanced Placement

Prerequisite: Teacher recommendation; past academic performance; successful completion of summer reading/work; PSAT scores or SAT scores in both Critical Reading and Writing Skills.

This is a college-level course for students in their last year of high school who have an interest in English and are recommended by their Grade 11 English teachers. The course combines lectures, seminars, a research project, and critical papers based on readings from major American, British, and world authors. Emphasis is placed on pre-critical discussion and writing with the goal of increasing students' ability to explain clearly, cogently, even elegantly, what they understand about literary works and why they interpret them as they do. Additional summer reading is required. Students must successfully complete summer reading/work. Students are expected to take the Advanced Placement Exam in May.

## Creative Writing

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Elective      Semester      Grades: 10-12      Honors or A Level

This one-semester course is open to students in Grades 10-12. Emphasis is placed on fiction, poetry, drama, and journal writing. Students write and peer edit on a regular basis. Honors credit will require additional independent work of honors quality; written expectations will be given to students at the beginning of the semester.

## Journalism

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      Honors or A Level

This course involves a systematic analysis of newspaper, television, and radio reporting through a study of news forms, editorial techniques, and feature writing styles. Students will be involved in all phases of school newspaper production, including writing, editing, typing and printing. This course is open to students of varying interests and abilities in Grades 10-12. Honors credit requires additional independent work of honors quality; written expectations will be given to students at the beginning of the year.

## Advanced Journalism

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Honors or A Level

Prerequisite: Journalism and teacher recommendation.

This course is designed for students who have already taken the basic Journalism course but who wish to expand their experiences in journalism. Students will learn not only to identify newsworthy stories but also to pursue the necessary information to be used in well-developed news/feature stories through responsible interviewing techniques learned in their basic Journalism courses. Editorials of criticism or interpretation and other stories will be developed and submitted for publication in the *Town Crier* (high school paper). Advanced Journalism students will be responsible for selecting topics for their articles, peer editing, and reviewing them with the teacher before submitting for publication in press-ready condition. Honors requirements will be given in writing to the students at the beginning of the year.

## Freshman/Sophomore Seminar

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Elective      Full Year      Grades: 9-10

Freshman/Sophomore Seminar is a course designed to support students who may require additional assistance in math and English instruction. The English portion supports students with opportunities to write using effective skills in organization, clarity, details from the text they analyze, and the proper use of quotations in their writing. Students will learn to read with an eye for details to be used in responding to questions related to the text. Students will develop skills to learn new vocabulary from content clues in the literature they read. A guide to taking multiple-choice tests will also be provided.

## Family and Consumer Sciences Department

Ms. Patricia Degon, Director 508-841-8856

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The Family and Consumer Science Program strives to encourage the development of each individual student to his/her fullest potential. There is no greater way to improve society than to improve each family's home life. This is especially pertinent as the basis of our curriculum reflects the core of daily living. By offering courses in child growth and development, consumer education, food and nutrition and personal growth, we attempt to give each student self-esteem, confidence, and awareness of others, in order to become a responsible contributor to society.

Family and Consumer Sciences is one of three disciplines within the Health Frameworks. Each of the Comprehensive Health content areas clearly relates to the discipline of Family and Consumer Sciences. Resource Management expands personal advocacy beyond consumer health. It includes managing home, consumer, workplace and environmental resources, which is the consumer education connection with topics such as child development, food science, nutrition and sports nutrition.

### Course Offerings:

Focus on Foods	Child Development I
Supersize Nutrition in Foods	Child Development II
Intercultural Foods	Honors Child Development II
American Regional Foods	Early Childhood Education
Interior Design	Honors Early Childhood Education

### Focus on Foods

*Meets Expectations for Student Learning: 4,5,7,8*

Elective Semester Grades: 9-12 A Level

Students will learn the basic technology of food preparation and be able to identify, understand, analyze, and evaluate food choices. Emphasis will be placed on safety and sanitation in food preparation. Units covered will include pastry, quick breads, yeast breads, eggs, fruits, vegetables and pasta. The basic principles of the USDA's new MYPyramid will be studied.

### Supersize Nutrition in Foods

*Meets Expectations for Student Learning: 5,7,8*

Elective Semester Grades: 9-12 A Level

Prerequisite: Focus on Foods.

This course will concentrate on the principles of good nutrition based on the USDA's new MYPyramid guidelines. We will explore the consequences of supersizing and experiment with altering the preparation and ingredients in familiar foods to make them more healthful, yet still appealing. We will explore alternatives to less healthy eating habits and become more mindful of the labels and contents of the foods we choose to eat.

### Intercultural Foods

*Meets Expectations for Student Learning: 5,7,8,9*

Elective Semester Grades: 9-12 A Level

Prerequisite: Focus on Foods

Students will prepare foods from Mexico, France, China, Italy and other countries while learning about the varying cultures and customs. Additional techniques in food preparation will be explored. Students should be open to sampling ethnic foods. This course will not be offered during the 2009-2010 school year.

## **American Regional Foods**

*Meets Expectations for Student Learning: 5,7,8,9*

Elective      Semester      Grades: 9-12      A Level

Prerequisite: Focus on Foods

American regional foods will be the focus of this class. Students will learn how various cultures and customs have influenced American Cooking. Students will select and serve meals from such areas as the Northeast, Midwest, South, Southwest and Pacific Coast. Connections will be made to content studied in Social Sciences.

## **Interior Design**

*Meets Expectations for Student Learning: 1,3,4,7,8,9*

Elective      Semester      Grades: 9-12      A Level

This course will expose students to the basic principles of interior design, as well as concepts related to housing styles, floor plans and layouts. In addition to gaining exposure to this career field, students will complete projects to demonstrate their understanding of concepts related to the course.

## **Child Development I**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Semester      Grades: 10-12      A Level

The course presents a fundamental knowledge of human growth and development to help one understand oneself and others. The focus is on gaining an understanding of children and the role that family plays in their lives. Emphasis is on skills essential to establishing a positive environment for maximizing a child's development physically, intellectually, emotionally and socially. Participation with the children in our Little Colonials Preschool supports our classroom learning.

## **Child Development II**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Semester      Grades: 10-12      A Level

Prerequisite: Child Development I

This course focuses on the early stages of development from conception through early childhood. An in-depth study of the four areas of development helps students understand what needs to be considered to maximize a child's potential. Consideration is also given to the responsibilities of caregivers, issues related to health and safety of the young child, and special challenges that may be faced. Continued participation in Little Colonials' Preschool offers experiences that help to connect academic and life skills.

## **Honors Child Development II**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Semester      Grades: 10-12      Honors

Prerequisite: Child Development I

Students will be expected to incorporate service credits to their Child Development II course work. The service credits are assignments with programs in our elementary schools and in our preschools involving after school time. Four experiences of approximately 2 hours each are required. Two must be completed each quarter. Students will write a reflection about their experience including where they did their service, how many children were present, the ages of the children and a description of these activities that took place. Reflections must be passed in with a signed service verification sheet. Honors placement will be based on the teacher's recommendation and past academic performance.

## **Early Childhood Education**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Child Development I and II

Students will coordinate their study of Early Childhood Education by participating in an on-site preschool lab. The students will focus on the entire operation of the preschool, including such topics as developing an appropriate environment, safety, health, routines and nutrition for children. The course will offer in-depth information on planning and implementing activities for children along with providing students with foundational work skills, techniques for guiding the behavior of children and guidelines for developing effective observation skills.

### **Honors Early Childhood Education**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective                  Full Year                  Grades: 11-12                  Honors

Prerequisite: Child Development I and II
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Students will coordinate their study of early childhood education by participating in an onsite preschool lab as well as an off site preschool exploration in the district. Students will be required to complete four service experiences in our elementary schools. Honors students will also submit two research projects. The students will assist with the facilitation of the entire operation of the preschool. The course will require in-depth planning and implementing activities for children along with providing students with foundational work skills, techniques for guiding the behavior of children and guidelines for developing effective observation skills. For honors credit, the student must execute a written agreement with the instructor for additional independent outside work. Honors placement will be based on the teacher's recommendation and the student's past academic performance.

**Foreign Language Department**  
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The main purpose of learning a foreign language is communication. As our world becomes a smaller place, with newer and more far-reaching communications, interaction with other countries and/or with peoples of different cultures here at home becomes more probable and immediate. Foreign language is an essential part of our students' education and all students should learn at least one language in addition to English to prepare them for life in the 21st century.

The goal of the Foreign Language program at Shrewsbury High School is communicative proficiency for all of our students. Within the last decade, traditional approaches to teaching language have yielded to new, performance-based approaches that have a common focus on the student's ability to use the language beyond the classroom in real-life situations. Proficient students emerge from foreign language programs, able, to a measurable degree, to communicate in the language as it is written and spoken by native speakers. Students will have a functional ability to understand, read, write, and speak the language. Emphasis is placed on what the student can do with the language, independent of how the language was learned, what methods were involved or what materials were used.

Because language and culture are so inextricably bound together, students who are exposed to foreign languages develop a respect for and a tolerance of cultural differences, and, in doing so, develop a better understanding of their own culture. Everyone can learn a second language, but it is a life-long process, and, study should begin as early as possible and continue throughout post-secondary education and beyond.

**Course Offerings:**

French I	Spanish V
French II A	Honors Spanish III
French II B	Honors Spanish IV
French III	Honors Spanish V
French IV	Advanced Placement Spanish
Honors French III	Latin I
Honors French IV	Latin II
French V	Latin III
Advanced Placement French	Honors Latin III
Spanish I	Honors Latin IV
Spanish II A	Honors Latin V
Spanish II B	Advanced Placement Latin
Spanish III	Mandarin Chinese I
Spanish IV	Mandarin Chinese II

**French I**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

This course is designed for all students beginning the study of French. Imagine being able to carry on a conversation in French! You CAN by learning the basics of the language. Vocabulary and simple language patterns are used in classroom conversations and daily activities. You will learn a great deal about France through discussion, videos, films, and handouts.

## **French II A**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is designed for students who have been successful in the study of French I and have acquired the necessary skills to move up to the next level. Students will continue to develop the skills of speaking, listening, writing and reading. Interactive computer software enhances the program and allows students to practice the concepts that they are learning in yet another medium. Culture is woven into the curriculum via textbook readings, class discussions, and videos.

## **French II B**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      B Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is designed for those students who have passed French I for credit, but still require significant practice and review of the four basic skills. Students will continue to hone listening, speaking, writing and reading skills, and concentrate on segments of French I that need additional review. While the curriculum is the same, the pace of this course will be slower than that of French IIA.

## **French III**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is intended for students who wish to continue studying French in order to achieve better competency with the language. Emphasis will be placed on extending grammar and vocabulary in order to improve the students' ability to communicate at a basic level. Various French-speaking countries will also be explored.

## **Honors French III**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course is designed to mirror the curriculum of French III, while providing a faster pace and more attention to accuracy. Students will continue to increase self-expression and hone the skills of listening, speaking, reading and writing through compositions and oral presentations. Students will also read authentic short stories. This course is conducted primarily in French.

## **French IV**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course extends the students' ability for proficiency in communication in the target language as more sophisticated expressions are learned. Students will continue to improve upon listening comprehension and oral expression, and, they will hone the reading skill by reading and discussing French novels. This course is conducted entirely in French.



## Honors French IV

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course is conducted entirely in French. It is intended for those students who are preparing for entry into Advanced Placement French the following year. Emphasis is placed on developing accuracy in both oral and written expression with more complex and finite grammar. Students will read authentic literature including 'Le Petit Prince', and the fables of LaFontaine.

## French V

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grade: 12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is conducted entirely in French. It is intended for those students who have achieved a reasonable degree of proficiency in French but do not wish to take an advanced placement level course. Emphasis in this course is placed on accuracy, in both oral and written expression, as more complex grammar is introduced.

## Advanced Placement French

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11 -12      Advanced Placement

Prerequisite: Demonstrated excellence in Honors IV level and strong teacher recommendation. Placement test may be required

This course is intended for students who have attained a high degree of proficiency in French and who are interested in completing studies comparable in content and difficulty to a full-year college level course. This course is designed to provide students with a communicative ability in French language. The course objectives are to develop the ability to understand spoken French in various contexts, and to develop French vocabulary sufficient for reading newspapers and magazine articles, literary texts and other nontechnical writings without dependence on a dictionary. Students will also develop the ability to express themselves in French, both orally and in writing, with reasonable fluency, coherence and accuracy. Students are expected to take the Advanced Placement Exam in May. This course is conducted entirely in French.

## Spanish I

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

This course is designed for all students beginning the study of Spanish. Students will learn the basics of the language while developing skills in comprehension and self-expression. A workable vocabulary and simple language patterns are used in conversations based on classroom experiences and daily activities. The course also introduces students to various cultural aspects of the Hispanic World.

## Spanish II A

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is designed for students who have been successful in the study of Spanish I and have acquired the necessary skills to move up to the next level. Students will continue to develop the skills of speaking, listening, writing and reading. Interactive computer software enhances the program and allows students to practice the concepts that they are learning in yet another medium. Culture is woven into the curriculum via textbook readings, class discussions, and videos.

## Spanish II B

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      B Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is designed for those students who have passed Spanish I for credit, but still require significant practice and review of the four basic skills. Students will continue to hone listening, speaking, writing and reading and concentrate on those segments of Spanish I that need additional review. While the curriculum is the same, the pace of this course will be slower than that of Spanish II A.

## Spanish III

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is conducted primarily in Spanish. It is designed for those students who have demonstrated an interest in the language and have acquired some communicative competency with the basic skills. Oral and written skills are emphasized as students produce frequent essays and oral presentations. Students will also continue to practice reading comprehension through various readings of graduated difficulty.

## Honors Spanish III

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course is designed to mirror the curriculum of Spanish III, while providing a faster pace and more attention to accuracy. Students will hone skills of speaking, listening, reading and writing through essays, oral presentations, skits, collaborative projects, etc. Students will continue to practice reading comprehension through use of a Spanish reader. Emphasis will be on student use of the language in real life situations. This course is conducted primarily in Spanish.

## Spanish IV

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course extends the students' ability to perfect communication in the target language via readings on contemporary Hispanic culture and customs. There is greater emphasis on written grammatical construction as students create and write dialogues and essays. Students continue to hone speaking skills through oral presentations and role-play situations as they acquire more sophisticated vocabulary. This course is conducted in Spanish.

## Honors Spanish IV

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course is designed for those students who enjoy speaking, writing, listening and reading in Spanish and are preparing for entry into Advanced Placement Spanish. Emphasis is on the use of proper grammar, but instruction is through active language. Students will present conversations, skits, and dialogues. Writing is generated from personal and current themes and due regularly. Literature, in the form of newspapers, magazines, poetry and short stories, is used. Cultural and historical components are taught using authentic materials. Videos are also included to enhance the curriculum. This class is taught entirely in Spanish.

## Spanish V

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grade: 12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course is a continuation of Spanish IV. There is continued emphasis on the four skills of speaking, listening, reading and writing as directed in the curriculum. Readings and written essays focus on the themes of love, friendship in literature from Latin America and Spain, including poetry, short stories and folktales. The culture and the history of Spain will be explored with projects related to many aspects of Spanish life. Oral presentations, skits and dialogues will improve speaking proficiency in the target language. The class is conducted in Spanish.

## Honors Spanish V

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 12      Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course is designed for advanced students who wish to continue the study of Spanish. This is primarily a literature and culture course with a review of all grammar. Authentic literature is used including short stories, short novels, plays and poetry. Films and videos that parallel the curriculum are shown. The cultural focus is on Spanish-speaking countries and includes music, dance and current event news. The class is conducted entirely in Spanish.

## Advanced Placement Spanish Language

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 11-12      Advanced Placement

Prerequisite: Demonstrated excellence in Honors IV level and strong teacher recommendation. Placement test may be required.

This course is designed for those students who have attained a high degree of oral proficiency in Spanish. The goal of the course is to prepare the student for the Spanish AP Language examination by emphasizing the basic objectives of proficiency in listening, speaking, reading and writing. All forms of writing are emphasized especially the directed and the open-ended question. Weekly journals and critical writing pieces are included. Students hone listening and speaking skills through repeated practice in the form of dialogues, skits, interviews, and directed questions. Picture sequences are also used to practice for the exam, and grammar is reviewed, fine tuned and applied in authentic communicative situations. Students are expected to take the Advanced Placement Exam in May. This class is conducted entirely in Spanish.

## Latin I

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

Latin I is a beginning course with emphasis on pronunciation, vocabulary, grammar and derivatives. Emphasis is also placed on Roman life and culture, the permanent value of the Latin language, and the social values of classical studies. The study of English derivatives from Latin roots will increase the student's working vocabulary. A deeper understanding of English grammar is a logical outcome of this course.

## Latin II

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

The content of Latin II has been selected and arranged in such a way as to further the student's linguistic, cultural and social development. After a review of Latin I, the students study more

difficult aspects of both the language and historical events. Students will spend time reading and translating Latin with special attention given to word order and sentence structure.

### Latin III

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective Full Year Grades: 10-12 A Level

Prerequisite: Demonstrated minimum competency with foreign language standards and teacher recommendation.

This course provides a continuation of Latin II plus more sophisticated outside reading of classical authors as well as more complex grammar patterns. Students will read selections from authors of the first century B.C. with special emphasis on the prose of Cicero and selections from Caesar, Eutropius and Nepos.

### Honors Latin III

*Meets Expectations for Student Learning 1,3,7,8, 9*

Elective: Full year Grades: 10-12 Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course is designed to mirror the curriculum of Latin III, while providing a faster pace and more attention to accuracy. Students will hone reading and writing skills through more difficult translations, oral presentations and collaborative projects.

### Honors Latin IV

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective Full Year Grades: 11-12 Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

The focus of this course will be on learning to read, translate and critique Latin poetry. Works of Ovid will be studied as well as the "Aeneid" of Vergil. By the end of the year, students will have an understanding of Latin poetry, both "Elegiac and Epic" and will have been exposed to the 'golden age' of Latin poetry.

### Honors Latin V

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective Full Year Grades: 11-12 Honors

Prerequisite: Demonstrated academic success and teacher recommendation.

This course will include a survey of Latin literature and will include areas such as letters, poetry and satire. This course will have the flexibility to examine any genre or time period of the language, depending on student interest.

### Advanced Placement Latin

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective Full Year Grades: 11-12 Advanced Placement

Prerequisite: Demonstrated excellence in Honors IV level and strong teacher recommendation. Placement test may be required.

This course is designed for those students who have attained a high degree of mastery in translating Latin literature. The goal is to prepare the student for the Latin Literature AP examination by emphasizing the literal translation of Latin lyric and epic poetry. In addition, a major emphasis will be placed on analyzing, discussing, and writing critical essays on Latin poetry. The fundamentals of Latin grammar will be reviewed in conjunction with a thorough exploration of the history of Late Republican Rome. Summer reading and/or a special project may be required. Students are expected to take the Advanced Placement Exam in May.

### Mandarin Chinese I

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective Full year Grades: 9-12 A Level

This course is offered to students who wish to begin the study of Mandarin Chinese language and culture. Basic skills taught during this course include Pinyin (a phonetic system), character

formation and simple sentence structure. Students will be required to know a minimum of 300 characters in order to be able to begin simple conversation in Chinese.

## **Mandarin Chinese II**

*Meets Expectations for Student Learning: 1,3,7,8,9*

Elective      Full year      Grades: 9-12      A level

Prerequisite: Demonstrated minimum competency with foreign language and teacher recommendation.
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This course is a continuation of the middle school program of Mandarin Chinese. Students will continue to work to hone speaking, listening and writing skills as they learn more characters and more sophisticated patterns of expression. Students will also learn about the history, geography and cultural differences of the Chinese people.

## Health and Physical Education Department

Ms. Patricia Degon, Director 841-8856

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The purpose of comprehensive school health is to provide each student with ongoing learning opportunities designed to maximize the prospect that each student will make positive decisions throughout life. The course of study will enable students to examine the options available to today's youth and identify components that are high risk and to be avoided. Our focus is clearly on prevention and promotion of wellness, not merely to prevent disease and disability.

The Health Curriculum Frameworks focus on building resilience that promotes the ability to thrive, persevere and maintain a positive attitude. **Health Literacy** is the capacity to obtain, understand and evaluate basic information. **Health Self-Management** enables students to integrate and apply essential knowledge and skills with respect to their own health-related decisions and behaviors. **Health Promotion and Advocacy** enables students to recognize and fulfill personal, social and civic responsibilities.

Health education provides opportunities for all students to develop and demonstrate health-related knowledge, attitudes and practices. It integrates the physical, mental, emotional, and social dimensions of health. This instruction is part of a sequential program designed to reinforce knowledge and positive attitudes to contribute to optimum health and wellness.

Physical education is an integral part of the total education of the student, contributing to the physical development of the individual through promotion and appreciation of physical fitness and activity. It is a planned sequence of learning experiences designed to fulfill the growth, development, and behavior needs of each student. We recognize the unique opportunity physical education has to contribute to social and emotional development, opportunities for positive peer group interaction, good sportsmanship, and proper self-discipline and control.

### Course Offerings:

Wellness Education	Performance Dance
Health Education	Exercise Physiology
Adaptive Health	Physical Education Leadership
Physical Education 9-12	Honors Leadership

### Wellness Education

*Meets Expectations for Student Learning: 1,3,4,5,7,8,9*

Required Semester Grade: 9 A Level

The Wellness course is required for all freshmen and must be passed for graduation. This curriculum begins with an orientation to the high school. Instructional emphasis will not only provide information but will facilitate decision-making capabilities around many life long choices. The content presented to students incorporates the following: mental/emotional health, reproduction/sexuality education, and substance abuse prevention.

### Health Education

*Meets Expectations for Student Learning: 1,3,4,5,7,8,9*

Required Semester Grade: 11 A Level

Health Education is a required course for all juniors that must be passed for graduation. Emphasis is placed on information building, and decision-making skills through the use of class discussions, audiovisual presentations, lectures, role-play, and guest speakers. Areas of concentration include disease prevention, and first aid and CPR. This is a course designed for older students preparing to enter the next stage in their life, beyond high school. The instruction in this course completes the secondary requirements contained in the Massachusetts Health Education Frameworks. At the completion of the semester all students will complete the Grade

11 District Health Exam and the performance score will be applied to measure achievement for student expectation #5.

### **Adaptive Health**

*Meets Expectations for Student Learning: 5,7,8,9*

Elective          Full Year          Grade(s): 9-12          A Level

Prerequisite: Director recommendation

This instruction will be modified for students with special needs. The course will address the health and safety needs and factors to promote wellness and responsibility in a format and setting that is conducive to their success.

### **Physical Education 9-12**

*Meets Expectations for Student Learning: 5,6,8,9*

Required          Semester          Grade(s): 9-12

Physical Education is required for all students in every grade and must be passed for graduation. Students rotate through a wide variety of activities, which are clustered into four strands of Team Sports, Lifetime/Recreational Sports, Adventure/Outdoor Activities and Creative Movement, which include many of the following: aerobics, step aerobics, weight training, basketball, field hockey, flag football, lacrosse, soccer, softball, volleyball, archery, badminton, bowling, golf, table tennis, tennis, track and field, cross country skiing, multicultural games, adventure activities, orienteering, and dance. Personal fitness seminars disseminating information on fitness and nutrition are presented to all students. The physical fitness levels of students are assessed and recorded. Skill competencies, written assignments and class evaluations are incorporated into the units. Each grade level is expected to show proficiency in the activities that are important for their personal development at the appropriate stage.

### **Performance Dance**

*Meets Expectations for Student Learning: 5,7,8,9*

Elective          Semester          Grade(s): 9-12          A Level

This course is offered in addition to the required PE course described above and is designed to offer students exposure to several areas of dance including ballet, tap, jazz, classical, modern and social dancing. Techniques of various professional dance groups will be studied. Dancers will be required to use their skills to choreograph a final performance for assessment.

### **Exercise Physiology**

*Meets Expectations for Student Learning: 1,3,5,7,8,9*

Elective          Semester          Grade(s): 11-12          A Level

Exercise physiology is offered in addition to the required PE course described above and may be taken during the junior or senior year. This class will primarily be a classroom experience; however, labs will be conducted that require active participation. Topics such as muscular contraction, cardiovascular assessment, nutrition and sports, ergogenic aids to sports participation, and the biomechanics of sport activities will be covered. Students having an interest in pursuing sports medicine, physical education, physical therapy, athletic training, or coaching as a career will benefit from taking this course.

### **Physical Education Leadership**

*Meets Expectations for Student Learning: 1,3,5,7,8,9*

Elective          Grade(s): 11-12          A Level

Prerequisite: Director's Approval.

This class may be taken during a student's junior or senior year. It is an elective course that may be taken to meet a student's normal physical education requirement or as an additional elective course. Students, under the direction of the physical education teaching staff, serve as assistant teachers, and may work with Adaptive PE classes. Students are required to keep a journal of their daily activities, write lesson plans for classes in which they assist, and write a term paper on their experience during the semester. A genuine interest in teaching or coaching is recommended.

## Honors PE Leadership

*Meets Expectations for Student Learning: 1,3,5,7,8,9*

Elective

Grade(s): 11-12

Honors

Prerequisite: Successful completion of the Physical Education Leadership course and approval of director.
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This elective course may be taken during a student's senior year and is an elective course. Students will serve as teacher aides in physical education at the elementary, middle or high school levels. Enrollment in this program is limited. Students are required to keep a journal of their daily activities and write a term paper on their experiences each semester. Also, with the aide of their master teacher, students write lesson plans and unit plans for classes that they teach. It is required that students have taken PE Leadership prior to this course. Any student with a genuine interest in teaching as a career will benefit from this course.



## Instructional Technology Department

Mr. Robert Cornacchioli, Director 841-8820

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The Instructional Technologies Department focuses on developing skills to enable students to gather, understand and manipulate information to enhance their learning experiences while at Shrewsbury High School and beyond. These technologies are integrated into all curriculum areas fully embracing the guiding principle that technology enhances teaching and learning. To assist in accomplishing these tasks, the Shrewsbury schools fully embrace the Department of Education's technology standards for all students:

- Demonstrate proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity.
- Demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media.
- Demonstrate ability to use technology for research, problem solving, and communication. Students locate, evaluate, collect, and process information from a variety of electronic sources. Students use telecommunications and other media to interact or collaborate with peers, experts, and other audiences.

For those students who have an interest in developing skills beyond what they receive in their regular programs, SHS offers several courses that range from introductory to advanced topics. Several of our course offerings require after school and evening time, which is an integral part of our program.

### Course Offerings:

Multi-Media Applications	Introduction to Television Production
Advanced Multi-Media	Television Production I
Introduction to Computer Science	Television Production II
Web Design	Advanced TV Production

### Multi-Media Applications

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8*

Elective      Semester      Grades: 9-12      A Level

Students will use many of the iLife software applications such as iPhoto, iTunes and iMovie to create and publish exciting multimedia projects. Students will learn about effective communication techniques as they work collaboratively to develop skills using: computers, camcorders, digital imaging tools, desktop publishing software, and hypermedia. All students will apply these new technology skills to the acquisition and analysis of information as they create their own multimedia production for this class as well as others.

### Advanced Multi-Media Design

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8*

Elective      Semester      Grades: 9-12      A Level

Prerequisite: Multi-Media Applications

Computers have become a critically important tool of design professionals as an aid in the communication of ideas. In this course, students will learn to use a variety of graphic visualization software. The course will provide students with a comprehensive introduction to the multimedia concepts required to transform their ideas into models and animations. Students will come to understand the full potential that these tools offer them to facilitate communication of complex ideas. Other advanced multimedia tools will also be explored. Special emphasis will be given to the development of project planning and workgroup skills. This course satisfies the arts graduation requirement.

## **Introduction to Computer Science**

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8*

Elective                      Semester                      Grades: 10-12                      A Level or Honors

Prerequisite: Multi-Media Applications and permission of staff.

Computer programming is an essential skill for almost every high-technology career field today. Computer programming also helps the development of logical, analytical, and structured thought processes, which are useful in every field. This course is an introduction to programming in a high-level language (Visual Basic). The content will include design of algorithms and writing of computer programs in the Visual Basic. This introduction to Visual Basic focuses on important concepts such as event-driven programming and working with objects. Beginning with an introduction to Visual Basic, objects, properties, and code, the text progresses through step-by-step, hands-on exercises, and reinforcement projects. This course can be taken for Honors credit with agreement of the instructor.

## **Web Design**

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8*

Elective                      Semester                      Grades: 9-12                      A Level

This class will focus on web page content, planning, design, setup and maintenance of a web site. Throughout the course students will work with partners to create a web site with multiple pages and functions. Students will become familiar with terms and components of the Internet, and develop an awareness of design considerations that affect web page construction. Students will learn to use many technology tools as they create their sites including scanners, digital cameras, and software. This is not a programming course, and although HTML will be discussed, powerful visual editors such as Dreamweaver will be used for page construction. With the widespread use of the Internet, web page design will provide students with technology skills and knowledge to become effective communicators in this exciting new medium. This course satisfies the arts graduation requirement.

## **Introduction to Television Production**

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8*

Elective                      Semester                      Grades: 9-12                      A Level

This course is a semester course for those students who have an interest in the field of television production and media integration. Students will learn the basics of video production: camcorder and studio camera use, interview techniques, story boarding, analog and digital editing using iMovie software, audio, video mixing, and post production. In addition, students will learn the importance of media literacy. This knowledge will enable the students to support classroom teachers in various projects and assist in elementary and middle school programming as well as produce their own segments for over-air broadcasts. This class requires after school and evening participation.

## **Television Production I**

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8,11*

Elective                      Full Year                      Grades: 9-12                      A Level

The students in this course will experience first hand the ever-changing technology in the field of television production and media integration. This class is an extension of Introduction to Television Production. The students will learn the basics of television production: camcorder and studio camera use, interview techniques, story boarding, analog and digital editing using iMovie software, audio, video mixing, and post production. During the spring semester, students will learn basic graphic design, directing, technical directing, lighting, floor managing, and video playback. Knowledge of these elements will enable the students to support classroom teachers in various projects and assist in elementary and middle school programming. This class requires after school and evening participation. On a rotating basis, students will participate in field production crews covering special events live and/or taped for later broadcasting. Some of the productions they will be responsible for are Colonial Magazine and ETS News 29. This course satisfies the arts graduation requirement.

## Television Production II

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8,11*

Elective

Full Year

Grades: 10-12

Honors or A Level

Prerequisite: Television Production I and approval of ETS director.

The purpose of this course is to further develop the skills acquired in previous classes with more emphasis placed on the quality of the segments produced. Students are expected to accept a more responsible role during productions for over air broadcasts including directing, technical directing, and graphic design. Students may also be responsible for the design of graphics for over air public announcements. Students will be introduced to Final Cut pro, one of the premier nonlinear editing software used in production today. Audio/video technology integration is an integral part of this program and it is expected that students will be involved in assisting teachers, students, and others to achieve this goal. Cooperative teamwork and strong organizational skills are essential. After-school and evening productions continue to be an integral part of the program. Honors credit requires a contract with the instructor for additional independent work. This course satisfies the arts graduation requirement.

## Advanced TV Production

*Meets Expectations for Student Learning: 1,3,4,5,6,7,8*

Elective

Full Year

Grades: 11-12

Honors or A Level

Prerequisite: Television Production I and II and approval of ETS director.

This class is offered as an independent study to those students who have demonstrated an ability to work independently in the past in Television Production I and II courses and who would like to continue their interest in studio productions and operations. These students have exhibited advanced knowledge of the television studio and its operations. They may also have an interest in furthering their education in the field of communications. The students who elect to take this course will be responsible for the following: sophisticated video productions, integration of advanced computer graphics, producing regular programming for curriculum and educational purposes, producing and directing special productions and sporting events, participating in channel programming and assisting students in Television Production I and II. Students will be introduced to Final Cut pro, one of the premier nonlinear editing software used in production today. Technology integration continues to be an integral part of this class and it is expected that students will participate in assisting others to achieve this goal. Honors credit requires a contract with the instructor for additional independent work. Enrollment is limited and this course will not appear on the course of studies selection sheet. Interested student must speak to the director as soon as possible. This course satisfies the arts graduation requirement.

## Mathematics Department

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An understanding of mathematics is vitally important in our society and, therefore, students are encouraged to take a rigorous course of high school mathematics. Algebra and Geometry provide the foundation for all other mathematics so we cannot overemphasize how important it is for students to work diligently to achieve a sound understanding of these subjects. We have developed a program to meet the diverse needs of the learners at Shrewsbury High School to provide all students with the opportunity to succeed in mathematics.

All of the math courses in our A-level and Honors level programs are college preparatory courses based on the standards set forth by the *Massachusetts Frameworks* and will ensure students an opportunity to be successful on statewide assessments. We offer the Freshman and Sophomore Seminar electives to support students who need additional review of the material in the foundation courses (Algebra & Geometry I, II, and Advanced Math I). Senior electives include advanced placement courses in Calculus (AB and BC) and Statistics. We also offer an enrichment opportunity in the Math Internship for advanced juniors and seniors to work as teacher assistants in the underclassmen classes. Other electives for seniors include Honor Statistics, Discrete Math I, Discrete Math II, Honors Calculus and Functions and Trigonometry.

The *Massachusetts Curriculum Frameworks* is incorporated into Shrewsbury High School's Mathematics Department curriculum in several ways. Reading, writing and speaking in mathematical terms are important aspects of all courses. Students are taught to read mathematical explanations and are encouraged to communicate in mathematical terms, both orally and in writing, to justify and explain solutions. Problem solving is the central focus and is discussed in real-world context. This involves posing and defining problems, considering different strategies and finding appropriate solutions that make sense. Skills are not taught in isolation, but rather through applications and connections to other curriculum areas, as well as through the integration of mathematical topics. Technology is incorporated into all courses through the use of computers and graphing calculators. Our goal is to empower students to solve problems by thinking and reasoning and consequently to build self confidence in their mathematical abilities.

### Course Offerings:

Algebra and Geometry I	Honors Statistics
Algebra and Geometry II	Honors Calculus
Honors Algebra and Geometry II	Advanced Placement Calculus AB
Research Topics and Honors Advanced Math I	Advanced Placement Calculus BC
Discrete Math I	Advanced Placement Statistics
Discrete Math II	Freshman Seminar
Honors Advanced Math I	Sophomore Seminar
Advanced Math I	Math Internship
Advanced Math II	Research Topics and Honors Alg. & Geom. II
Honors Advanced Math II	Functions and Trigonometry

### Algebra and Geometry I

Meets Expectations for Student Learning: 1,2,3,4,7,8,9

Elective

Full Year

Grades: 9-12

A Level

Prerequisite: Teacher recommendation

This course will investigate and build upon the basic foundations of Algebra and Geometry in an approach that will enable students to make the connections necessary to apply their skills in a variety of application based problems. The units of study will include patterns in data, patterns

of change, linear functions, patterns in shape, and exponential functions. Important ideas are continually revisited for students to make connections and develop a lasting understanding of the mathematics they are studying. Graphing calculators and programs such as Sketchpad will be used throughout the course as a tool for problem solving and to develop students' understanding. The TI83 graphing calculator is highly recommended because it is used extensively.

## **Algebra and Geometry II**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

Prerequisite: Past academic performance in Honors Algebra, Algebra I or Algebra & Geometry I and teacher recommendation.

This course is a continuation of the Algebra and Geometry Year 1 course. The units of study will include Functions, Equations and Systems, Coordinate Methods, Regression and Correlation, Quadratic and other Non-Linear Functions and Equations, Probability, Trigonometric Methods and Matrix models. Students who have completed Algebra and Geometry I or a full year Algebra I course must complete this course before continuing on to Advanced Math I. The TI83 graphing calculator is highly recommended because it is used extensively.

## **Honors Algebra and Geometry II**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-12      Honors

Prerequisite: Past academic performance in Honors Algebra, Algebra I or Algebra & Geometry I and teacher recommendation. A placement test may be used.

This course will investigate and build upon topics in Advanced Algebra and Geometry. The units of study will include Functions, Equations and Systems, Coordinate Methods, Regression and Correlation, Quadratic and other Non-Linear Functions and Equations, Probability, Trigonometric Methods and Matrix models. Students who have completed Algebra and Geometry I or a full year Algebra I course must complete this course before continuing on to Advanced Math I. The TI83 graphing calculator is highly recommended because it is used extensively. Students in the Honors level course are expected to develop independent thinking skills as they approach new situations and investigate topics in depth. The TI83 graphing calculator is highly recommended because it is used extensively.

## **Research Topics and Honors Advanced Math I**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10      Honors

Prerequisite: Past academic performance in Honors Algebra & Geometry II and teacher recommendation. Must also be enrolled in Research Topics and Honors Chemistry. A placement test may be used.

This course will investigate and build upon topics in Advanced Algebra and Geometry. The units of study will include Functions, Equations and Systems, Coordinate Methods, Regression and Correlation, Quadratic and other Non-Linear Functions and Equations, Probability, Trigonometric Methods and Matrix models. Students who have completed Algebra and Geometry I or a full year Algebra I course must complete this course before continuing on to Advanced Math I. The TI83 graphing calculator is highly recommended because it is used extensively. Students in the Honors level course are expected to develop independent thinking skills as they approach new situations and investigate topics in depth. The TI83 graphing calculator is highly recommended because it is used extensively. This course will also incorporate research methods in Math and Science. Students will be required to complete a yearlong research project in the field of Math and/or Science under the guidance of their teachers. Students who sign up for this course must also sign up for Research Topics & Honors Introductory Physics. The TI83 graphing calculator is highly recommended because it is used extensively.

## Discrete Math I

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grade: 12      A-level

Prerequisite: Advanced Math I and Advanced Math II or Advanced Math I and Functions & Trigonometry

This course will examine Discrete Mathematics in the area of Probability and Statistics. Topics will include studying the major concepts and tools for collecting, analyzing, displaying and drawing conclusions from data. Statistics is the science of good decision-making in the face of uncertainty and is used in many disciplines such as financial analysis, economics, auditing, marketing research, production and operations. In this course, students will learn the fundamentals of descriptive and inferential statistics and how to apply them in everyday situations. Technology will be used throughout the course including the features from a TI-83 graphing calculator as well as functions used in Microsoft Excel. This course will also include a component to continue to prepare students for standardized testing such as college entrance and placement exams. The fundamental topics in courses through Advanced Math II will be reviewed and reinforced.

## Discrete Math II

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grade: 12      A-level

Prerequisite: Advanced Math I and Advanced Math II or Advanced Math I and Functions & Trigonometry

This course will examine Discrete Mathematics in the areas of management science, social science, graph theory, number theory, and computer science. Students will study how to apply mathematics to a wide range of challenging problems on the cutting edge of modern research. Discrete Math influences everything from entrepreneurial successes and coding theories to the fairness of voting practices. This course will also include a component to continue to prepare students for standardized testing such as college entrance and placement exams. The fundamental topics in courses through Advanced Math II will be reviewed and reinforced.

## Honors Advanced Math I

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Past academic performance in Honors Algebra & Geometry II or Algebra & Geometry II and teacher recommendation. A placement test may be used

This higher-level mathematics course will further the study of topics in Advanced Algebra, Geometry and Trigonometry to prepare students for the study of pre-calculus and Calculus. The units of study will include Reasoning and Proof, Inequalities and Linear Programming, Similarity and Congruence, Polynomial and Rational Functions, Circles and Circular Functions, Modeling Sequential Change, and Inverse functions. Students in the Honors level course are expected to develop independent thinking skills as they approach new situations and investigate topics in depth. The TI83 graphing calculator is highly recommended because it is used extensively.

## Advanced Math I

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Algebra & Geometry I and II and teacher recommendation.

This higher-level mathematics course will further the study of topics in Advanced Algebra, Geometry and Trigonometry to prepare students for the study of pre-calculus and Calculus. The units of study will include Reasoning and Proof, Inequalities and Linear Programming, Similarity and Congruence, Polynomial and Rational Functions, Circles and Circular Functions, Modeling Sequential Change, and Inverse functions. The TI83 graphing calculator is highly recommended because it is used extensively.

## Advanced Math II

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Past academic performance in Advanced Math I or Honors Advanced Math I and teacher recommendation.

This pre-calculus course formalizes and extends important mathematical ideas drawn from the four strands of Algebra and Functions, Geometry and Trigonometry, Statistics and Probability and Discrete Mathematics. The focus will be on the Mathematics needed to be successful in college mathematics, Statistics, or Calculus courses. Topics studied will include the fundamental concepts underlying calculus and their applications including: rate of change, modeling motion, logarithmic, polynomial, and rational functions, conic sections. Emphasis will also be placed on manipulating symbolic representations of polynomial, rational, exponential, logarithmic, and trigonometric functions. Other topics will support further study in Probability and Statistics, including counting models, mathematical induction, binomial distributions, and statistical inference.

## Honors Advanced Math II

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Past academic performance in Honors Advanced Math I or Advanced Math I and teacher recommendation. A placement test may be used.

This pre-calculus course formalizes and extends important mathematical ideas drawn from the four strands of Algebra and Functions, Geometry and Trigonometry, Statistics and Probability and Discrete Mathematics. The focus will be on the Mathematics needed to be successful in college mathematics, Statistics, or Calculus courses. Topics studied will include the fundamental concepts underlying calculus and their applications including: rate of change, modeling motion, logarithmic, polynomial, and rational functions, conic sections. Emphasis will also be placed on manipulating symbolic representations of polynomial, rational, exponential, logarithmic, and trigonometric functions. Other topics will support further study in Probability and Statistics, including counting models, mathematical induction, binomial distributions, and statistical inference. Students who successfully complete this rigorous course are ready for Advanced Placement Calculus AB, Advanced Placement Calculus BC, or Advanced Placement Statistics. The TI83 graphing calculator is highly recommended because it is used extensively.

## Honors Statistics

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grade: 12      Honors

Prerequisite: Past academic performance in Honors Advanced Math II or A-level Advanced Math II, strong teacher recommendation.

This course will investigate the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The four major conceptual themes are: 1) Exploring Data: Interpreting and analyzing graphical displays and descriptive statistics, 2) Sampling & Experimentation: Planning and conducting observational studies and experiments, 3) Probability and Simulation: Exploring random phenomena, and 4) Statistical Inference: Estimating population parameters and testing hypotheses. One major project per theme will be assigned. The TI-83/84 graphing calculator will be used extensively.

## Honors Calculus

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grade: 12      Honors

Prerequisite: Past academic performance in Honors Advanced Math II or Advanced Math II and teacher recommendation. A placement test may be used.

A firm foundation in calculus is necessary for pursuing careers in science, mathematics, business, and some social sciences. The intent of the course is to teach the subject matter with a level of rigor suitable for the mainstream calculus student. This course is not designed for those wishing to take CEEB Advanced Placement Test. The student must have a strong background in

trigonometry, coordinates, graphs, lines, functions, and algebraic manipulations. Topics include: functions and limits, differentiation, applications of differentiation, integration, applications of the definite integral, logarithmic and exponential functions, inverse and hyperbolic functions, and techniques of integration. A TI83 graphing calculator is recommended because it is used extensively. Summer reading and/or a special project may be required.

### **Advanced Placement Calculus AB**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective                      Full Year                      Grade: 12                      Advanced Placement

Prerequisite: Past academic performance in Honors Advanced Math II, strong teacher recommendation, successful completion of summer work. A placement test may be used.

A firm foundation in calculus is necessary for pursuing careers in science, mathematics, business, and some social sciences. AP Calculus should provide the building materials for success on the advanced placement exam, thus enabling those students who successfully complete this course to begin their college careers on firm footing. In order to have a successful year students must understand that calculus will involve a great deal of their time and energy during the year and in preparation for the AP exam. Topics to be studied include polynomial, trigonometric, logarithmic, and exponential functions and their graphs; limits; differentiation; integration; applications of each of these; definite integrals; and techniques of integration. A TI83 graphing calculator is required. Summer reading and/or a special project may be required. Students are expected to take the Advanced Placement Exam in May.

### **Advanced Placement Calculus BC**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective                      Full Year                      Grade: 12                      Advanced Placement

Prerequisite: Past academic performance in Honors Advanced Math II, strong teacher recommendation, successful completion of summer work. A placement test may be used.

A firm foundation in calculus is necessary for pursuing careers in science, mathematics, business, and some social sciences. AP Calculus BC should provide the building materials for success on the advanced placement exam, thus enable those students who successfully complete this course to begin their college careers on firm footing. In order to have a successful year students must understand that calculus will involve a great deal of their time and energy during the year and in preparation for the AP exam. Topics to be studied include polynomial, trigonometric, logarithmic, and exponential functions and their graphs; polar and parametric curves; limits; differentiation; integration; applications of each of these; definite integrals; basic and advanced techniques of integration; series. Summer reading and/or a special project may be required. Students are expected to take the Advanced Placement Exam in May.

### **Advanced Placement Statistics**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective                      Full Year                      Grade: 12                      Advanced Placement

Prerequisite: Past academic performance in Honors Advanced Math II or A-level Advanced Math II, strong teacher recommendation, successful completion of summer work.

This course will investigate the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The four major conceptual themes are: 1) Exploring Data: Interpreting and analyzing graphical displays and descriptive statistics, 2) Sampling & Experimentation: Planning and conducting observational studies and experiments, 3) Probability and Simulation: Exploring random phenomena, and 4) Statistical Inference: Estimating population parameters and testing hypotheses. Summer work and an end-of-year project are required. Students are expected to take the AP exam in the spring. The focus throughout the year will be on preparation for the AP exam, with the goal of completing all of the curriculum with the rigor of a college level course. The TI-83/84 graphing will be used extensively.



## Freshman Seminar

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grade: 9      A Level

Prerequisite: Student must be enrolled in Algebra and Geometry I and teacher recommendation.

This semester long course provides extra instructional time with a content area teacher to support the curriculum in the students' regular Mathematics course. In addition, students will complete a curriculum that will provide them with the organizational and study skills necessary for success with their high school Math class as well as standardized assessments. Students must be recommended by a Math teacher to participate in the Freshman Seminar.

## Sophomore Seminar

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grade: 10      A Level

Prerequisite: Student must be enrolled in Algebra and Geometry II or Advanced Math I and teacher recommendation.

This semester long course provides extra instructional time with a content area teacher to support the curriculum in the students' regular Mathematics course. In addition, students will complete a curriculum that will provide them with the organizational and study skills necessary for success with their high school Math class as well as standardized assessments. Students must be recommended by a Math teacher to participate in the Sophomore Seminar.

## Math Internship

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grades: 11-12      A Level

Prerequisite: Past academic performance in Advanced Math II or Honors Advanced Math II and teacher recommendation.

Students will be assigned by the department director to work in an underclassmen class as an assistant to the teacher in that class. Interns will assist in their assigned class by helping students as needed with their questions on class work. The teacher may ask interns to facilitate work with small groups of students or create study guides and review materials with or for students. The intern may also assist students with the creation and organization of their notebooks and mathematics toolkits. Students who participate in this program will meet with their cooperating teacher and will complete monthly feedback forms. The grade for this class will be a pass/fail grade determined by attendance and the feedback forms completed by both the teacher and student.

## Research Topics and Honors Algebra & Geometry II

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grade: 9      Honors

Prerequisite: Teacher recommendation. Must also be enrolled in Honors Introductory Physics.

This higher-level mathematics course will further the study of topics in Advanced Algebra, Geometry and Trigonometry to prepare students for the study of pre-calculus and Calculus. The units of study will include Reasoning and Proof, Inequalities and Linear Programming, Similarity and Congruence, Polynomial and Rational Functions, Circles and Circular Functions, Modeling Sequential Change, and Inverse functions. Students in the Honors level course are expected to develop independent thinking skills as they approach new situations and investigate topics in depth. This course will also incorporate research methods in Math and Science. Students will be required to complete a yearlong research project in the field of Math and/or Science under the guidance of their teachers. Students who sign up for this course must also sign up for Research Topics & Honors Chemistry. The TI83 graphing calculator is highly recommended because it is used extensively.

## **Functions & Trigonometry**

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective                  Full Year                  Grades: 11-12                  A Level

Prerequisite: Past academic performance in Algebra & Geometry II and Advanced Math I.

This course in higher-level mathematics will continue to explore multi-variable models, formalization of the concept of functions, function notation, domain and range. Students will use linear, exponential, quadratic and other polynomial functions to model situations. Trigonometric models will also be studied. This course will prepare students for Advanced Math II or college level mathematics courses. The TI83 graphing calculator is highly recommended because it is used extensively.

# Music and Drama Department

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The performing arts have a far-reaching impact on all of our lives with real world connections. The teaching of music and drama enhances critical thinking skills while developing self-discipline, focus, and the ability to accomplish goals. The objective of our department is to have students develop an appreciation for the beauty of music and drama as well as providing a creative outlet for their expression of talent and emotions.

Students participating in Shrewsbury High School performance groups will enjoy singing and playing for concerts, assemblies and musical theater productions. Music of various styles and time periods is explored. Additionally, the opportunity exists to prepare and perform advanced works for district and state competitions as well as solo and ensemble festivals.

Music is a field of study that everyone can enjoy. Non-performance courses focus on building musical skills, theoretical knowledge and sound recording experience. Students can utilize technology to gain an understanding of composition and improvisation as well as exploring sound texture and reproduction. Additionally, they will develop a working knowledge of appropriate vocabulary.

Students may also choose to participate in courses advancing their skills and knowledge of theater. Movement for theater is a fulfilling outlet where students will conceptualize the evolution of choreography throughout the history of Broadway. Focus of the course will also include exploring and developing skills of dance styles. Lighting, set design, costuming and set construction are additional components of the drama program explored through stagecraft.

## Course Offerings:

Orchestra	Techniques of Music Theory I
Concert Band	Techniques of Music Theory II
Honors Wind Ensemble	Advanced Placement Music Theory
Honors Jazz Band	Music Technology
Freshman Choir	Theater Arts I
Mixed Choir	Theater Arts II
Honors Women's Choir	Movement for Theatre
Honors A Cappella Choir	Theatrical Design

## Orchestra

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective

Full Year

Grades: 9-12

Honors or A Level

Prerequisite: Experience with Middle School Orchestra or equivalent. Previous class or private instruction.

Orchestra is a performance-based class for string players and a selected pianist. Students rehearse, study, and perform music for string ensemble and full orchestra. Music of each historical period is explored. Several performances are given throughout the year. Often the ensemble will perform at other venues, including competitions and festivals. Basic instruction for string playing techniques and styles is provided. Students are encouraged to audition for Central District and All State Music Festivals and will have the opportunity to work independently in small ensembles. Students will also have the opportunity to audition for honors Chamber Orchestra. Performances are an important component of this course and

students are required to participate as part of their commitment to this group and part of their evaluation.

### **Concert Band**

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 9-12      A Level

Prerequisite: Experience with Middle School Bands or equivalent. Previous class or private instruction.

Concert Band is a performance course available for percussionists, brass, and woodwind players. This class explores concepts in musicianship, ear training, theory, music literacy, musical terminology, and music history as well as teaching leadership qualities. Students in Concert Band will rehearse and perform quality wind band literature. The organization performs for school concerts throughout the year, and often prepares for other venues, including competitions and festivals. Students are encouraged to audition for Central District and All-State Music Festivals. Performances are an important component of this course and students are required to participate as part of their commitment to this group and part of their evaluation.

### **Honors Wind Ensemble**

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Selection by audition

Honors Wind Ensemble is designed to develop a student's highest musical potential through performing advanced quality literature in the wind band repertoire. Students are selected by audition for participation to insure a well-balanced ensemble. Auditions are held the previous spring. Advanced concepts in ear training, theory, music literacy, musical terminology and music history will be explored. The organization performs for school concerts throughout the year, and often prepares for other venues, including competitions and festivals. Students are encouraged to audition for Central District and All-State Music Festivals. Performances are an important component of this course and students are required to participate as part of their commitment to this group and part of their evaluation. This course meets four days per cycle.

### **Honors Jazz Band**

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 9-12      Honors

Prerequisite: Permission of Instructor.

Students participating in Jazz Band will play the music of studio, dance, jazz and rock bands. Pop-ballads, Latin, jazz, and rock concert arrangements are rehearsed and performed. Activities include reading from sheet music, analyzing melodic lines, jazz rhythms and chord progressions, and improvisation. This is a course intended primarily for band members. Any interested guitar, bass and keyboard players must audition for the instructor prior to acceptance. All rhythm, (including percussion), are limited to two per instrument. The organization performs for school concerts throughout the year, and often prepares for other venues, including competitions and festivals. Students are encouraged to audition for Central District and All-State Music Festivals. Performances are an important component of this course and students are required to participate as part of their commitment to this group and part of their evaluation. This course meets two days per cycle.

### **Honors Jazz Band/Honors Wind Ensemble**

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Selected by audition

Students participating in this accelerated course will rehearse and prepare quality literature for the full year, meeting 6 days per cycle. \*All content and requirements previously described for Honors Jazz Band and Honors Wind Ensemble apply.

## Honors Jazz Band/Concert Band Studies

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 9-12      Honors

Prerequisite: Permission of instructor

Students participating in this accelerated course will rehearse and play quality literature for the full year, meeting 6 days per cycle. \*All content and requirements previously described for Honors Jazz Band and Concert Band apply. Independent work will be monitored and assessed.

## Freshman Choir

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grade: 9      A Level

This course is available for all freshmen who have a desire to learn more about singing and performing with a high school vocal ensemble. Students are screened for voice placement. All are accepted. Vocal techniques are developed, which include breath control, diction, posture, and intonation. Emphasis is placed on improved musical literacy and sight singing. Literature includes pop and show tunes, folk songs, spirituals, and classical selections for SAB, (SATB) voicing. Students are encouraged to audition for Central District and All-State Music Festivals. Performances are an integral component of this course and students are required to participate as part of their commitment to this group and part of their evaluation. Full year participation in this course is strongly suggested to grasp the essence of fully participating in a vocal performance ensemble, however this course may be taken for one semester with prior approval required from the instructor and director of music.

## Mixed Choir

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Placement by audition. All are accepted to a vocal ensemble.

Students are selected for participation by audition to insure a well-balanced ensemble. The music performed is written for four to six part harmony. Students encounter music of many styles and genres. This group performs for school concerts throughout the year, and often prepare for festivals and competitions. Students are encouraged to audition for Central District and All-State musical festivals. Performances are an important component of this course and students are required to participate as part of their commitment to this group and part of their evaluation. Full year participation in this course is strongly suggested to grasp the essence of fully participating in a vocal performance ensemble, however this course may be taken for one semester with prior approval required from the instructor and director of music.

## Honors Women's Choir

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Placement by audition. \*All are accepted to a vocal ensemble.

Students are selected for participation by audition to insure a well-balanced ensemble. The music is of an advanced level for three and four part treble harmony. Students encounter music of many styles from early as well as modern composers. This group performs for school concerts throughout the year, and often prepares for other venues, including competitions and festivals. Students are encouraged to audition for Central District and All-State music festivals. Performances are an important component of this course and students are required to participate as part of their commitment to this group and part of their evaluation.

## Honors A Cappella Choir

*Meets Expectation for Student Learning 1,4,6,7,8,9,10,11*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Placement by audition. \*All are accepted to a vocal ensemble.

Students are selected for participation by audition to insure a well-balanced ensemble. The music is of an advanced level allowing for solo work and unaccompanied singing. Students encounter music of many styles from early as well as modern composers, including vocal jazz. This group

performs for numerous community events throughout the school year, in addition to scheduled concerts. Often the ensemble will perform at other venues, including competitions and festivals. Students are encouraged to audition for Central District and All-State music festivals. Performances are an important component of this course and students are required to participate as part of their commitment to this group and part of their evaluation.

### **Techniques of Music Theory I**

*Meets Expectation for Student Learning 1,2,3,4,6,7,8*

Elective                      Semester                      Grades: 10-12                      A Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

Techniques of Music Theory is designed to develop and improve skills of rhythmic and melodic sight-reading, ear training, and solfege, (sight singing). Additionally, this course will introduce the tools and vocabulary necessary for composing and analyzing music, and students will be taught basic piano skills. Students will be exposed to the realm of electronic music and composition through the use of the computer and synthesizer at the MIDI (musical instrument digital interface) workstation. This is a valuable course for any student who wishes to continue studying music after high school.

### **Techniques of Music Theory II**

*Meets Expectation for Student Learning 1,2,3,4,6,7,8*

Elective                      Semester                      Grades: 10-12                      Honors

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

This course covers an in depth study of harmony. Topics include: composition, counterpoint, orchestration and arranging as well as a systematic study of historical musical styles. Students will continue to enhance their skills of ear training, dictation, and solfege as well as gaining further experience using the MIDI (musical instrument digital interface) workstation.

### **Advanced Placement Music Theory**

*Meets Expectation for Student Learning 1,2,3,4,6,7,8*

Elective                      Full Year                      Grades: 11-12                      Advanced Placement

Prerequisite: Teacher recommendation; successful completion of Techniques of Music Theory I & II. Standardized test scores and placement test scores may also be used.

Advanced Placement Music Theory is designed to develop the skills of motivated students in the reading and analysis of notated music. Emphasis will be placed upon developing listening skills, sight singing ability, as well as the knowledge of rhythm, melody, harmony, and form. While the main emphasis is placed on music of the Common Practice period (1600-1750), music of other stylistic periods, including 20th Century scales and styles, is also studied. Upon completion of the course, students are expected to take the AP Music Theory Exam.

### **Music Technology**

*Meets Expectation for Student Learning 1,2,3,4,6,7,8*

Elective                      Semester                      Grades: 9-12                      A Level

Music Technology is a fine arts-science course that will familiarize students with the principles and practices used in recording and manipulating sound. The goal of this hands-on course is to provide students with the concepts and technology needed to effectively document audio events such as concerts and recitals with a high degree of quality. A variety of technology including laptop computers, analog and digital devices will be used to record, edit, and produce projects throughout the semester. Class projects will include the recording of rehearsals, recitals, and concerts toward the purpose of enhancing production skills and sharing the progress of performing groups with students, parents, and administrators. Skills of sequencing and music composition will also be developed through use of the MIDI workstation

## Theater Arts I

*Meets Expectation for Student Learning 1,3,6,7,8,9,10,11*

Elective                      Semester                      Grades: 9-12                      A Level

Theatre Arts is a one semester elective that is activity-based. Participants will learn basic performance skills incrementally, beginning with exercises in stage movement and improvisation. Although the exercise format continues through the semester, the focus shifts toward more formal acting skills. Character development and motivation are explored through small group scene study. This course culminates with a final one-act theatre presentation.

## Theater Arts II

*Meets Expectation for Student Learning 1,3,6,7,8,9,10,11*

Elective                      Semester                      Grades: 10-12                      A Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance.
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This course is for serious drama students, and is a continuation of Theatre Arts Level I. Greater academic challenge will be provided through a variety of practical activities and projects that will include styles of dramatic literature, styles of acting, playwriting, voice, movement, and stage directing. Students will also work on projects that investigate the nature and drama of social issues as they continue to advance their stage skills. Opportunities for public performance will be provided.

## Movement for Theater

*Meets Expectation for Student Learning 1,3,5,6,7,8,9,10,11*

Elective                      Semester                      Grades: 9-12                      A Level

Movement for Theater is a course designed to familiarize students with various theatrical dance styles. A history of Broadway theater movement will be studied and students will experience the execution and design of choreography. No prior experience is required. Skills will be taught from warm-ups to mini-combinations. Opportunities for studying guest artists will be presented, (live or video clip).

## Theatrical Design

*Meets Expectation for Student Learning 1,3,6,7,8,9,10,11*

Elective                      Semester                      Grades: 9-12                      A Level

Theatrical Design will explore the design process of a show including set design, lighting design, costume/make-up design, sound design, and properties design. Students will learn how to read and analyze a play for design elements. Students will design for two productions selected by the instructor. No prior theatre knowledge is needed to register for this course. Students will be introduced to professional resources in the theatrical field.

# Science and Technology Education Department

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## Science

In this academic area, students learn more than the basic knowledge about specific sciences; students learn the lifelong skill of approaching a problem in a scientific manner. In our technology-based society with its rapid rate of change, having a science background will be an asset.

Using the *Massachusetts Science and Technology/Engineering Curriculum Frameworks* as a guide and reinforcement for teaching practices, the Science Department: (1) builds on students' curiosity and existing knowledge by modeling questioning along with making connections between the present science course and ideas carried over from earlier studies and experiences. (2) expands the inquiry approach to laboratory investigations. Often, investigations are open ended, allowing students to move in directions that develop as students generate questions and find ways to answer their own questions. (3) develops habits of mind that emphasize a respect for evidence, persistence, open-mindedness and awareness of the effects of our actions on the surroundings in which we live. (4) integrates technology, science, mathematics and human affairs to investigate complex problems faced in today's world. (5) emphasizes the applications of all areas of science to our students' lives.

Students in ninth grade will take discipline-specific Massachusetts Comprehensive Assessment System (MCAS) exams based on their enrollment in either Introductory Physics or Biology. Passing one of these exams is a graduation requirement of the Commonwealth of Massachusetts.

## Course Offerings:

Introductory Physics - B	Advanced Placement Physics
Introductory Physics	Biology
Honors Introductory Physics	Honors Biology
Research Topics and Honors Introductory Physics	Advanced Placement Biology
Earth and Space Science	Honors Human Anatomy and Physiology
Environmental Science	Bioethics
Honors Environmental Science	Lab Chemistry
Astronomy	Chemistry
Honors Astronomy	Honors Chemistry
Physics	Research Topics and Honors Chemistry
Honors Physics	Advanced Placement Chemistry

## Introductory Physics - B

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective

Full Year

Grades: 9-10

B Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

Introductory Physics-B is a conceptual study of fundamental physical laws that govern our universe. Skills in laboratory procedures, quantitative manipulations, graphical interpretations, and scientific habits of mind are developed. Students learn the practical applications of major concepts in forces and motion, energy and momentum, heat, waves and electromagnetism. Teachers emphasize the close association between science and technologies and integrate appropriate technology applications.



## Introductory Physics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-10      A Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

Introductory Physics is a conceptual study of fundamental physical laws that govern our universe. Skills in laboratory procedures, quantitative manipulations, graphical interpretations, and scientific habits of mind are developed. Course topics include forces and motion, energy and momentum, heat, waves and electromagnetism. Teachers emphasize the close association between science and technologies and integrate appropriate technology applications. This course is considered a lab science.

## Honors Introductory Physics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-10      Honors

Prerequisite: Algebra I or Algebra/Geometry I - Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

This course is designed for the student who shows a high interest in science and has a strong proficiency in mathematics. Honors Introductory Physics is a study of the fundamental physical laws that govern our universe, stressing both concept and mathematical interpretation. Skills in laboratory procedures, quantitative manipulations, graphical interpretations, and scientific habits of mind are developed and applied. Course topics include forces and motion, energy and momentum, heat, waves and electromagnetism. Teachers emphasize the relationship between evidence and models, and integrate appropriate technology applications. This course provides an excellent foundation for Advanced Placement Physics. This course is considered a lab science.

## Research Topics and Honors Introductory Physics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-10      Honors

Prerequisite: Algebra I or Algebra/Geometry I - Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

This course involves the same content as Honors Introductory Physics with an emphasis on integrating concepts from Honors Algebra and Geometry II with chemical relationships. This course is an excellent option for a freshman student interested in pursuing an independent research project in science or math. Students will be required to complete a year-long research project in the fields of science and/or math under the guidance of their teachers. Students who sign up for this course must also sign up for Research Topics & Honors Algebra and Geometry II. This course is considered a lab science.

## Earth and Space Science

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance.

Earth and Space Science addresses the Massachusetts State Frameworks and is similar to Introductory Physics in that student develop skills in laboratory procedures, quantitative manipulations and graph interpretations and the application of physics principles. Course topics include: astronomy, geology, meteorology, oceanography, environmental science and the interconnection of each of these major branches of Earth and Space Science. This course is considered a lab science.

## Environmental Science

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grades: 11-12      A Level

Prerequisite: Biology and Chemistry and teacher recommendation.

This semester elective course will analyze the connection between the human population and the use of the Earth's resources. Topics will include fresh water sources and pollution, air quality and climate change, land use and agriculture, renewable and non-renewable resources, waste, recycling and governmental policy (both domestic and internationally). Students will participate in and complete selected research projects and laboratory investigations that require a basic understanding of chemistry (the periodic table and reactions) and ecology (biomes and diversity).

## Honors Environmental Science

*Meets Expectations for Student Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grades: 11-12      Honors

Prerequisite: Biology and Chemistry and teacher recommendation.

Honors Astronomy is a course directed at highly motivated students, who have an interest in science and mathematics. Course topics mirror those covered in Environmental Science (see description above), but a significant amount of additional work and independent study will be required for this course.

## Astronomy

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grades: 11-12      A Level

Prerequisite: Teacher recommendation.

This semester elective course is designed to examine the structure of our solar system, galaxy and the universe. Students research the various contributions that ancient civilizations have made to the field of astronomy and how increased technology throughout history has helped our knowledge and understanding of the origins and structures of planets, stars, galaxies and the universe.

## Honors Astronomy

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grades: 11-12      Honors

Prerequisite: Teacher recommendation.

Honors Astronomy is a course directed at highly motivated students, who have an interest in science and mathematics. Course topics mirror those covered in Astronomy (see description on previous page) , but a significant amount of additional work and independent study will be required for this course.

## Physics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Advanced Math I and teacher recommendation.

Physics is a course that builds students' conceptual understanding of physical principles and complements this understanding with mathematical applications. Additionally, students considering a career in any scientific field should first study physics in high school before encountering physics in college. Topics include forces and motion, energy and momentum, heat, waves, light and sound, and electricity and magnetism. This course includes training in reasoning, as well as instruction in the concepts of physics. There will be extensive laboratory work requiring both traditional methods and computer assisted data acquisition and analysis techniques. This course is considered a lab science.

## Honors Physics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Advanced Math I, or Honors Advanced Math I and teacher recommendation.

Highly motivated students planning college majors in science, engineering or mathematics are urged to take this course. Topics include mechanics, heat, waves and optics, and electricity and magnetism. An inquiry approach is taken with the extensive lab work, which is critical to the course. Labs will include traditional as well as computer-assisted data acquisition and analysis techniques. This course is considered a lab science.

## Advanced Placement Physics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Advanced Placement

Prerequisite: Honors Introductory Physics OR Honors Physics, Honors Advanced Math I and teacher recommendation.

Advanced Placement Physics is designed to be the equivalent of a rigorous general physics course taken in college and focuses on the requirements established by the College Board (See <http://apcentral.collegeboard.com>). Topics include: mechanics, electricity and magnetism, thermal physics, waves and optics, and atomic and nuclear physics. Students need to be proficient with algebra and trigonometry. Calculus, if used, will apply to some theoretical developments and will require only a basic understanding. The course is principally designed to develop students' ability to interpret and analyze physical information presented in verbal, mathematical and graphical form and hence is a problem-solving course. The laboratory component will engage students in designing experiments, determining uncertainties in measurement, drawing inferences and communicating results. Students are expected to take the B version of the Advanced Placement Exam in May. A summer assignment is required. This course is considered a lab science.

## Biology

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Introductory Physics and teacher recommendation.

Biology is designed to give students an introduction to ecology, chemistry of life, cell structure and function, genetics, evolution and biodiversity, as well as selected topics in anatomy and physiology. Practical laboratory exercises following the scientific method will provide the student with experiences in biological problem solving. These exercises are designed to reinforce the material taught and discussed in class. This course is considered a lab science.

## Honors Biology

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-10      Honors

Prerequisite: Algebra I or Algebra/Geometry I - Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

Honors Biology is a course designed for students who demonstrate high academic achievement and motivation in science and mathematics. Students will be expected to complete a significant amount of reading and writing assignments as well as quantitative and qualitative analysis of laboratory work. Topics emphasized include ecology, chemistry of life, cell structure and function, genetics, evolution and biodiversity, as well as selected topics in anatomy and physiology. An independent or team research project will be completed. This course is considered a lab science.

## Advanced Placement Biology

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Advanced Placement

Prerequisite: Honors Biology and Honors Chemistry and teacher recommendation.

This course is designed to be the equivalent of a first year college biology course given to science majors (see <http://apcentral.collegeboard.com>). By achieving a certain proficiency on the Advanced Placement examination given in May, credit may be granted at a number of colleges. Using a college textbook, the course is a fast-paced and in-depth study of the fundamentals of biology and focuses on the requirements established by the College Board. Twelve predetermined laboratory projects will be completed during the year. Each lab involves considerable analysis of data. Summer reading and/or a special project are required. Students are expected to take the Advanced Placement Exam in May. This course is an excellent review for material on the SAT II. This course is considered a lab science.

## Honors Human Anatomy and Physiology

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Honors Biology or Biology and Honors Chemistry or Chemistry and teacher recommendation.

This is a course for students interested in any health care field, scientific research or biology in general. Learning experiences are designed to explore the anatomy (structure) and physiology (function) of each of the systems in the human body, as well as topics such as nutrition and exercise as they relate to physiology. The laboratory component of this course includes a significant amount of animal dissection in order to model the anatomy of the human body. Students opposed to dissection should strongly consider whether or not this is an appropriate course selection. The science faculty considers dissection to be an important learning experience and skill that is required for this elective course. Upon written request from a student's parent or guardian, a student who chooses not to participate in dissection will be provided with an alternative assignment.

## Bioethics

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grade: 12      A Level

Prerequisite: Honors Biology or Biology and teacher recommendation.

Bioethics provides students with an opportunity to examine and discuss the social, ethical and legal dilemmas that arise from advances in medicine and biotechnology. Potential topics include organ donation and transplantation, abortion, assisted reproduction, euthanasia and assisted suicide, death and dying, environmental ethics, medical ethics, animal research and genetic technologies. Position papers on selected topics are assigned as part of the curriculum. Students who want to take this course for honors credit must execute a written agreement with the teacher for additional work.

## Lab Chemistry

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      B Level

Prerequisite: Teacher recommendation.

Students will be studying many of the practical applications of chemistry. All of the concepts are developed in the laboratory, making regular class attendance vitally important. Topics covered include: the scientific method, chemical bonding, mixtures, solutions, nuclear chemistry, chemistry in the home and workplace, chemistry and pollution. This course is considered a lab science.

## Chemistry

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Teacher recommendation.

Chemistry is the science dealing with the structure and composition of substances and the mechanisms by which changes in composition occur. Topics include properties of matter, atomic structure, periodicity, chemical bonding, reactions and stoichiometry, behavior of gases, solutions, acids and bases, and selected topics in equilibrium, kinetics, thermochemistry, and electrochemistry. Emphasis is placed on experimentation, use of the scientific method, problem solving and the applications of chemistry to the world. Daily assignments and activities engage students in the applications of chemistry. This course is considered a lab science.

## Honors Chemistry

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      Honors

Prerequisite: Honors Algebra/Geometry II or Integrated Algebra/Geometry II and teacher recommendation.

Honors Chemistry studies the structure and composition of substances and the mechanisms by which changes in composition occur in greater depth than A-level chemistry. Topics include properties of matter, atomic structure, periodicity, chemical bonding, reactions and stoichiometry, behavior of gases, solutions, acids and bases, equilibrium, kinetics, thermochemistry, and electrochemistry. Emphasis is placed on experimentation, use of the scientific method, problem solving and the applications of chemistry to the world. A high level of self-discipline is required for the completion of independent assignments. Strong mathematical reasoning is essential for success in this course. This course is a lab science.

## Research Topics and Honors Chemistry

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10      Honors

Prerequisite: Honors Algebra/Geometry II or Integrated Algebra/Geometry II and teacher recommendation.

This course involves the same content as Honors Chemistry with an emphasis on integrating concepts from Honors Advanced Math I with chemical relationships. This course is an excellent option for a sophomore interested in pursuing an independent research project in science or math. Students will be required to complete a year-long research project in the fields of science and/or math under the guidance of their teachers. Students who sign up for this course must also sign up for Research Topics & Honors Advanced Math I. This course is considered a lab science.

## Advanced Placement Chemistry

*Meets Expectations for Student-Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Advanced Placement

Prerequisite: Honors Chemistry and an Honors math course, teacher recommendation and permission of instructor.

Advanced Placement Chemistry is designed to be the equivalent of a rigorous college general chemistry course and focuses on the requirements established by the College Board (See <<http://apcentral.collegeboard.com>>). Emphasis will be on the quantitative reasoning and problem-solving skills necessary to explain chemical phenomena and enable predictions. Topics include: solution and gas stoichiometry, modern atomic theory, chemical bonding, colligative properties, chemical kinetics, thermochemistry and thermodynamics, chemical equilibrium, reaction prediction and electrochemistry. AP Students will be expected to write explanations to non-quantitative questions based on their developed knowledge of chemical principles, and to conduct mathematical manipulations in preparation for the AP Chemistry exam given in May. Summer work and/or a special project may be required. The course can be taken in either the junior or senior year. Students are expected to take the Advanced Placement Exam in May. This course is an excellent review of material on the SAT II. This course is considered a lab science.

## Technology Education

Students in Technology Education classes learn how technology draws from science and mathematics to fashion products that solve practical problems encountered in our lives. Whether the student is learning about established processes or developing new technological processes, the engineering protocol becomes evident in each technology education course. This protocol entails:

- Identifying a need that can be addressed by technological inventions or innovations.
- Using mathematical and scientific background along with creativity to fashion solutions that address the need.
- Visualizing solutions in graphical form in two and three dimensions.
- Building prototypes to test and redesign based on the outcome of preliminary testing results.
- Making engineering presentations of the solution.
- Considering the societal impacts and tradeoffs of the new technology.

The varied course selections offered in Technology Education provide all students with opportunities to explore technology, solve problems, develop effective and safe work habits, gain appreciation for the engineering design process, work cooperatively with others and apply knowledge in a practical manner. Four important areas of technology are emphasized: 1) communication, 2) construction, 3) manufacturing and 4) power/energy/transportation.

### Course Offerings:

Exploring Technology	Internal Combustion Engine
Robotics/Electronics	Exploring Engineering
Architecture and Graphic Design	Principles of Engineering
Consumer Auto	Introduction to Engineering
Automobile Systems	Digital Electronics
Transportation and Power	

### Exploring Technology

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Semester or Full Year Grades: 9 -12 A Level

This course is designed to offer the student an exploratory experience in general technology. Students rotate through ten different modular workstations where they gain technological knowledge by performing hands-on activities in the fields of: construction, basic electricity, electronic communications, hydraulics, pneumatics, materials and processes, lasers, fiber optics, mechanisms, research and design, aerodynamics, and alternative energy. Students will also use the engineering design process to identify a design problem within constraints, evaluate ideas, build and test prototypes. Can be taken for one semester or a full year. This course can fulfill part of the science credit requirement for graduation.

### Robotics/Electronics

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Semester Grades: 9-12 A Level

Robots are devices that have the intelligence to interpret information, make decisions, and then effect their environment. The fundamentals of electrical circuits (i.e. components and configurations) will be examined through class-work and hands-on activities, including circuit construction. Students in this class will also explore the relationship between humans, computers and machines by utilizing the engineering design process to design and fabricate robotic devices. No previous background is required.

## Architecture and Graphic Design

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 9-12      A Level

The course will emphasize the design process necessary for the planning and graphic presentation of an efficient home by learning about the relationship between various rooms and spaces. Acting as if they were architects working for a client, and using computer aided design equipment, students will draw floor plans, three-dimensional models and elevations of a house in an American architectural style of their choice. The history of architecture will be explored. Custom scale models of students' house designs will be constructed. An understanding of the elements and principles of design will become clear to students as they practice these techniques throughout the course. Students who wish to explore the fields of architecture, and /or interior design will benefit greatly from the class. Honors credit can be arranged through a written agreement with the instructor for additional independent work. This course fulfills the semester arts graduation requirement.

## Consumer Auto

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective      Semester      Grades: 9-12      A Level

This course is designed for the student who generally will not further his or her education in the auto industry, but who realizes the importance of auto knowledge. The student will be instructed in the everyday operation and maintenance of the car, and will learn what to look for when purchasing a vehicle. Excluding housing, the vast majority of people will spend more money on automobiles than anything else during their lifetime. It makes a great deal of sense to know as much as you can about them.

## Automobile Systems

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Internal Combustion Engine

Students will solve problems and gain a fundamental understanding of the automobile by working on the common major systems, engine, lubrication, cooling, fuel, emission, exhaust, transmission, suspension, brake, steering, heating & air conditioning, electrical, and body. Students will have the opportunity to explore the relationship between computers and the integrated electronic systems of automobiles. In the class, the student will become familiar with many of the different positions that are available in the field of automotive technology, and will learn to provide automotive services. The educational and training opportunities available to the students after high school will be stressed. Students who wish to explore the field of automotive tech should enroll in this class. Successful completion of this course with a grade of B or better will qualify the student for college credit at New England Institute of Technology.

## Transportation and Power

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      A Level

Prerequisite: Auto Systems

In addition to working on the major automobile systems, students will be involved with activities that include the construction of: 1. various power and energy systems such as wind and solar, 2. various transportation systems such as electric and marine vehicles, 3. systems that deal with recycling and waste disposal. Students will have the opportunity to explore the relationship between computers and the integrated electronic systems of automobiles. In the class, the student will become familiar with many of the different positions that are available in the fields of automotive technology, transportation, and power and will learn to produce goods and provide services related to these fields. Students who wish to explore the field of automotive technology should enroll in this class. Successful completion of this course with a grade of B or better will qualify the student for college credit at New England Institute of Technology.

## Internal Combustion Engine

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Semester Grades: 9-12 A Level

In this course, students will work with the two and four-cycle internal combustion engine in order to gain an understanding of fuel systems, carburetion, ignition systems, engine lubrication, engine cooling, measuring engine performance, tune-ups, cylinder reconditioning, piston rings, rods, bearings, valves, and pollution control.

## Exploring Engineering

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Full Year Grades: 9-12 Honors or A Level

This course is a year-long implementation of the *Engineering the Future* curriculum developed by the Boston Museum of Science and provides students with an introduction to engineering and technology through hands-on activities, cooperative learning and problem solving. Students will use the engineering design process to design and build projects in the following units: design and manufacturing, thermal and fluid systems, electricity and communications, and construction and integrated systems. To obtain honors credit, the student must execute a written agreement with the instructor for additional work. This course can fulfill part of the science credit requirement for graduation.

## Introduction to Engineering

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Full Year Grades: 9-12 Honors or A Level

Prerequisite: Algebra I or Algebra/Geometry I

Using the nationally recognized *Project Lead the Way* hands-on curriculum, students will explore the Engineering Design Cycle in problem-based projects. They will also learn to use sophisticated three-dimensional modeling software to create and communicate the details of their products. Emphasis is placed on analyzing potential solutions and communicating ideas to others. This pre-engineering course is designed to enable students to explore the field as a career choice and provides the rigorous, relevant training required to excel in any related post-secondary program. To obtain honors credit, the student must execute a written agreement with the instructor for additional work. This course is recommended as the first course in the *Project Lead the Way* engineering sequence and can fulfill part of the science credit requirement for graduation.

## Principles of Engineering

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Full Year Grades: 10-12 Honors or A Level

Prerequisite: Algebra/Geometry II

Using the nationally recognized *Project Lead the Way* hands-on curriculum, students explore the wide variety of engineering and technology principles in the areas such as mechanisms, thermodynamics, electrical systems and materials testing. Using activities, projects and problem-solving, students investigate the integration of math, science and technology in engineering applications. This pre-engineering course is designed to enable students to explore the field as a career choice and provides the rigorous, relevant training required to excel in any related post-secondary program. To obtain honors credit, the student must execute a written agreement with the instructor for additional work. This course is recommended as the second course in the *Project Lead the Way* sequence and can fulfill part of the science credit requirement for graduation.

## Digital Electronics

*Meets Expectation for Students Learning: 1,2,3,4,7,8,9*

Elective Full Year Grades: 11-12 Honors or A-Level

Prerequisite: Algebra/Geometry II

Using the nationally recognized *Project Lead the Way* hands-on curriculum, students use problem-solving models to investigate applied logic and the applications of electronic circuits and devices. Projects focus on the investigation of basic analog and digital circuitry. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and



devices. This pre-engineering course is designed to enable students to explore the field as a career choice and provides the rigorous, relevant training required to excel in any related post-secondary program. To obtain honors credit, the student must execute a written agreement with the instructor for additional work. This course is recommended as the third course in the *Project Lead the Way* sequence and can fulfill part of the science credit requirement for graduation.

**Social Sciences Department**  
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The Social Sciences are rooted in a diverse but common heritage, and together they offer insights into the nature and causes of political affairs, social and economic patterns and human behavior. Critical inquiry about man, society and history generates a broad awareness and deeper understanding of the human experience. The social sciences encourage students to develop an interdisciplinary perspective of the world around them through the study of history, literature, economics, society, philosophy and psychology.

All of the required courses (World Civilizations, American History, American Studies) offered by the SHS Social Sciences Department are aligned with the content, concepts and skills outlined in the *Massachusetts History and Social Science Frameworks*. As a requirement for graduation beginning with the class of 2012, students will be expected to pass the MCAS in US History at the end of their junior year. The elective courses offered by the Social Sciences Department also incorporate the concepts and skills outlined in the *Massachusetts History and Social Science Frameworks*.

In the courses that follow, students are provided with challenging and diverse learning opportunities, which encourage them to explore their role in and relationship to their local community, country and the world. Students also examine issues of individualism, socio-economic class, race, nationalism and globalization. In addition, students will develop their ability to research effectively, think critically and to express their ideas in written, visual and oral formats. Our goal as Social Science teachers is to empower students to be active, capable and caring contributors to the world in which they live.

**Course Offerings:**

World Civilizations	America and the World Today
American History	Honors Topics: Asian and African History
American Studies	Economics
Sociology	Global Studies
Psychology	Advanced Placement Human Geography
Advanced Placement Psychology	Social Science Internship
Advanced Placement United States History	Themes in American History (I & II)
Honors Topics: Modern European History	World Religions

**World Civilizations**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9*

Required Full Year Grade: 9 A Level

In the first semester, students will investigate Europe from the Renaissance and Reformation through the Age of Revolutions. The second semester begins with an examination of the era of Imperialism and Colonization and concludes with an analysis of post World War II societies and civilizations. Politics and diplomacy are studied as well as the social, economic, religious, scientific and technological factors that have shaped world history. Students will develop skills in working with primary sources, research, discussion, reading and writing. Assessment strategies include written and oral reports, objective questions, open-response questions and document-based questions.

**American History from 1763 to 1877**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9,10*

Required Full Year Grade: 10 Honors or A Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance.
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This is the first year of a two-year course in American history. Following a chronological approach, the course begins with the colonial era and continues through Reconstruction. Students will study the causes and consequences of the American Revolution, as well as the development of the Constitution. Other topics of study include the early national period, the reform movements of the 1800s, Jacksonian democracy, westward expansion, the Civil War and Reconstruction. The year will conclude with a study of the American West in the late 1800s. The core content is the same for both the Honors and A-level courses, however, the pace and focus on skills will be different. Honors level students will read more in-depth primary and secondary source documents, examine American history in a global context and participate in more independent learning. All students will continue to develop their skills working with primary sources, research, discussion, reading and writing. Assessment strategies for all students will include written and oral reports, objective questions, open-response questions and document-based questions.

## American Studies

*Meets Expectations for Student-Learning: 1,3,4,7,8,9,10*

Required      Full Year      Grade: 11      Honors or A Level

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance.

This is the second year of a two-year course in American history. Following a chronological approach, the course begins with a review of the American West and continues to the present day. All of the traditional aspects of US History and English are part of this course. Students study these subjects with two teachers. Classes are scheduled during consecutive periods, providing flexibility in grouping students into different combinations. This course provides students with insight into the relationships among our literary, cultural, artistic, philosophical and scientific traditions that have created a diverse but common American heritage. Students will continue to develop their skills in working with primary sources, research, discussion, reading and writing. There are some common assignments and a variety of assessments are used including written, visual and oral reports, objective questions, open response questions and document-based questions. The core content is the same for both the Honors and A-level courses, however, the pace and focus on skills will be different. Honors level students will use a college-level textbook, read more in-depth primary and secondary sources and participate in more independent learning. All students will participate in Performance Assessment at the end of the second semester.

## Sociology

*Meets Expectations for Student-Learning: 1,3,4,7,8,11*

Elective      Semester      Grades: 11-12      Honors or A Level

Students will explore human society in a variety of ways. This will involve the investigation of such social institutions as the family, politics, education, economics, and work. Sociological research will be used throughout the course to conduct surveys, interviews, and experiments on various topics. Additional topics of study will include social group dynamics and organization, as well as crime and sociology in law. Community service learning is incorporated in the course.

## Psychology

*Meets Expectations for Student-Learning: 1,3,4,7,8*

Elective      Semester      Grades: 11-12      Honors or A Level

Prerequisite: None. In most cases, students who have taken Psychology are not eligible to take AP Psychology.

Psychology students will explore human behavior and the mind. Psychology provides an overview of many of the areas of psychology including social psychology, adolescence, methods of research, consciousness, learning, neuroscience, personality, and abnormal behavior and therapy. Classes will include a combination of discussions, lectures, films, and presentations. A variety of theories will be examined. Students should learn to think critically with psychology as they improve their critical thinking skills. Further, they should develop a better understanding of themselves and the forces acting upon them. Students seeking honors credit must execute a written agreement with the teacher for additional work.

## **Advanced Placement Psychology**

*Meets Expectations for Student-Learning: 1,3,4,7,8*

Elective      Full Year      Grades: 11-12      Advanced Placement

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

Advanced Placement Psychology is the equivalent of a college introductory psychology course. It explores human behavior and the mind. It addresses such questions as: "What makes us who we are? What are the biological bases of behavior? How do we learn? What are sensation and perception? What is adolescence? What is mental illness and how is it treated? What motivates people?" Classes include a combination of discussions, lectures, films and presentations. A variety of theories will be examined including Freud, Skinner, Piaget, and Kagan. Students will develop a better understanding of themselves and the forces acting upon them, as well as improve their critical thinking and writing skills. This course meets the College Board's expectations for an AP Psychology course. Students should expect that the reading, writing, and discussions reflect demands appropriate to a college course. There will be a research project. Students are expected to take the Advanced Placement Exam in May. Successful completion of summer work is expected.

## **Advanced Placement United States History**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9,10*

Elective      Full Year      Grades: 11-12      Advanced Placement

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

AP US History is designed to provide students with the analytical skills and factual knowledge necessary to deal with issues in United States history from the age of discovery to the present. It is also designed to prepare students for college by making demands upon them equivalent to those made by full-year introductory college courses. Solid reasoning and writing skills, along with a willingness to devote considerable time to studying, are necessary to succeed. A variety of approaches will be used to analyze American politics, society, economics and history. Students will use a college level textbook, read extensive primary and secondary sources and demonstrate their ability to learn independently. This course meets the College Board's expectations for an AP US History course. Juniors accepted into this course will take either AP English (Language and Composition) or Grade 11 Honors English. These will replace the junior American Studies requirement. Students are expected to take the Advanced Placement Exam in May and will participate in a modified performance assessment in June. Successful completion of summer work is expected.

## **Honors Topics: Modern European History**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

This Modern European History course gives students an opportunity to acquire knowledge of European History from 1450 to the present. Through such study, students will develop the ability to weigh evidence and reach conclusions on the basis of facts. Students will learn how to extract information from primary documents and secondary sources; to use research techniques to make presentations, both written and oral; and to demonstrate analytical and interpretive skills of good scholarship. Students will present all research findings using both oral and written formats.

## **America and the World Today**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9,10*

Elective      Semester      Grades: 11-12      Honors or A Level

This course is designed to provide students with an understanding of their role in the local, state, national and global community. This course will also review the purpose, principles and practices of American government. Students will investigate their rights and responsibilities as American citizens and how to exercise these rights and responsibilities at the local, state, national

and international levels. Current issues, class discussions, guest speakers, research and a service learning project provide students the opportunity to explore various aspects of their local and global community. Students continue to develop their skills as critical thinkers when analyzing evidence, issues and arguments.

### **Honors Topics: Asian and African History**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9*

Elective                      Full Year                      Grades: 11-12                      Honors

Prerequisite: Course placement is based on the teacher's recommendation and past academic performance. Standardized test scores and placement test scores may also be used.

This course is designed to enrich students' knowledge of Africa and Asia from ancient times to the present. Students will begin their study investigating early societies in Asia and Africa. Through the use of primary source documents, research, written, oral and visual reports, students study the evolution of society, religion, government, economics, philosophy and the arts in these regions. The course will conclude by examining the role the various regions of Asia and Africa play in the world today.

### **Economics**

*Meets Expectations for Student-Learning: 1,2,3,4,7,8*

Elective                      Semester                      Grades: 11-12                      Honors or A Level

This course is designed to provide students with an introduction to economics. Following the guidelines of the Department of Education Frameworks, this course examines the allocation of scarce resources and the economic reasoning used by government agencies and by people as consumers, producers, savers, investors, workers and voters. Key elements include the study of scarcity, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economic stabilization and trade.

### **Global Studies**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9*

Elective                      Semester                      Grades: 10-12                      Honors or A Level

Prerequisite: Teacher Recommendation

*Global education teaches students the knowledge and skills necessary for citizenship in a culturally diverse and globally interconnected world. (SPS Global Studies Committee)*

This course will introduce students to and provide them with an understanding of their role in a global society. It will also provide them with the knowledge and skills necessary to participate in an increasingly globalized world. Students will investigate a myriad of topics related to globalization through an examination of current events, class discussions, guest speakers and independent research. Topics that will be considered include government & politics, environmental issues, social & cultural conflicts and economics.

### **Advanced Placement Human Geography**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9*

Elective                      Full Year                      Grade: 12                      Advanced Placement

Prerequisite: Director Approval

This course will introduce students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of the Earth's surface. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Topics of study in this course include: geographic concepts, population, cultural patterns and processes, political organization of spaces, agricultural and rural land use, industrialization and economic development, cities and urban land use. Throughout the course, students will develop and refine their ability to understand how cultural landscapes and regions emerge; use maps and other spatial data to pose and solve problems; identify and analyze the local, regional, national and global factors that influence a phenomena; and understand the ways in which events and processes operating in one place influence those operating at other places. Students are expected to take the AP exam in the spring.

## **Social Science Internship**

*Meets Expectations for Student-Learning: 3,4,7,8,9*

Elective      Semester      Grades: 11-12      A Level

Prerequisites: Teacher Recommendation; interview with director

Students will be assigned by the department director to work in a World Civilizations or American History class as an assistant to the teacher in that class. Interns will assist in their assigned class by helping students as needed with class work, including projects, in-class activities and other assignments. The teacher may ask interns to facilitate work with small groups of students or create study guides and review materials with or for students. The intern may also assist students with the organization of their notebooks, test preparation, projects and long-term planning. Students who participate in this program will meet with their cooperating teacher and will complete monthly feedback forms. The grade for this class will be a pass/fail grade determined by attendance and the feedback forms completed by both the teacher and student.

## **Themes in American History (I & II)**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9,10*

Elective      Semester      Grades: 11-12      Honors or A level

This course will provide students an opportunity to explore American history in an in-depth thematic way. Students will examine four themes in American History each semester. Some examples of potential themes are War, Popular Culture (sports, music & movies), the Arts, Patriotism & Nationalism, Crime & Punishment and Minority Experiences. Students may take one or both semesters of the course, different themes will be addressed in each semester. Students will be expected to read primary and secondary sources, view a variety of films, and engage regularly in class discussions. Students will be assessed using a variety of techniques including individual and group projects, essays, and presentations. Each semester of the course will conclude with a project based final exam. Students seeking honors credit must meet with the teacher and director to develop a written agreement about supplemental work and due dates for honors credit.

## **World Religions**

*Meets Expectations for Student-Learning: 1,3,4,7,8,9*

Elective      Semester      Grades: 11-12      Honors or A level

Religion is a powerful and pervasive force in our world, both historically and in the present day. Students will explore the history, structure, beliefs, and traditions of a variety of worldwide religions. This course will include the study of religious traditions of Middle Eastern origin (Judaism, Christianity, Islam), South Asian origin (Hinduism, Buddhism) and East Asian origin (Daoism, Confucianism, Shinto). Through discussion, field trips, and primary and secondary sources, students will think critically about, as well as develop a respect for, what people believe and why they believe it. Students seeking honors credit must execute a written agreement with the teacher for additional work.

## Visual Arts Department

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The Visual Arts Program provides students with the opportunity to work with a wide variety of materials in order to develop their skills, perceptions and creativity. Each course is designed to introduce or master skills from earlier training as well as to develop a knowledge base of various artists and art movements. Students in all courses are provided opportunities to work with technology as a research and/or creative tool.

Some courses require students to complete a basic "intro" course. Once students successfully complete this course they may take a variety of semester courses. When Art Intro is taken with Drawing or Painting, or when Art Foundations is taken, students may pursue full year studio level courses. These yearlong courses help prepare students for a college major or a career in the arts through the creation of a portfolio. For the serious art student, the following sequence is recommended:

- Freshman: Art Foundations or Art Intro with Painting or Drawing
- Sophomore: Studio I and Sculpture or Ceramics
- Junior: Honors Studio II and one elective
- Senior: Honors Studio III or Advanced Placement Studio and one elective

All courses offered in the Visual Arts Department incorporate standards-based instruction and learning and meet the Massachusetts Creative Arts Curriculum Frameworks. "Learning in, about and through the arts develops each learners capacity to make meaning from experience, to respond, creatively and to contribute to society." (MCACF)

### Course Offerings:

Art Intro	Painting
Art Foundations	Sculpture and Ceramics II
Digital Imaging	Studio I
Drawing	Studio II: Honors Portfolio
Creative Sketchbooks	Studio III: Honors Portfolio
Ceramics	Advanced Placement Studio
Photography	

### Art Intro

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 9-12 A Level

This is the basic prerequisite course for all students. This satisfies the graduation requirement and allows students to take other art offerings. The elements and principles of art are featured.

Students are introduced to different media and subject matter, are encouraged to think creatively and critically and are introduced to various artists and art movements. Some work is done outside of class setting.

### Art Foundations

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Full Year Grades: 9-12 A Level

Students who have an interest in art and in a multiple year art experience are encouraged to take this course. Students are given a thorough experience in media and the creative process and are encouraged to think creatively and critically. The elements and principles of art are stressed and students are introduced to various artists and art movements. Some work is done outside of the class setting.

## Digital Imaging

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 9-12 A Level

Students will use the Photoshop software program as a creative tool for self-expression. They will use the computer scanner and digital camera as artist tools in a series of guided and open-ended exercises. The principles and elements of design will be introduced.

## Drawing

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 9-12 A Level

Prerequisite: Art Intro or Art Foundations

Students will develop and strengthen their observational skills from Art Foundations or Art Intro. Drawing media such as charcoal, pencil, colored pencil, pastel, pen and ink, and conte crayon will be introduced. Compositions will focus on observation of the figure, still life as well as portraiture, landscape and the use of perspective. Some work is done outside of the class setting.

## Creative Sketchbooks

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 9-12 A Level

Using sketchbooks and creative journaling, students will explore art as a process rather than a product. They will experiment with a wide variety of materials and concepts through short two and four day assignments. They will reflect on topics related to their identity and the world around them. The objective is for the student to see the world as an artist and to creatively problem solve.

## Ceramics

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 9-12 A Level

Students will use both hand built techniques and the potter's wheel. They will explore the use of glazes and firing of ceramic ware. Attention will focus on form and function. A materials fee may be assessed.

## Photography

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 11-12 A Level

Using black and white film, students will create a body of work that represents their basic knowledge of the manual camera use and darkroom techniques. They will take, develop and print their own pictures demonstrating an understanding of composition, values and tones. Students are encouraged to use their own SRL manual camera and all students will provide their own film and photo paper at a cost of \$60.00.

## Painting

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 9-12 A Level

Prerequisite: Art Intro or Art Foundations

Students will take their drawing skills and apply them to a variety of painting media and subjects. Watercolor, acrylic, tempera, and mixed media will be explored. Artists and art movements will be referenced; as will be the use of color, color harmonies, value and spatial composition. Students will be encouraged to develop a personal style. Some work is done outside of the class setting.

## Sculpture and Ceramics II

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective Semester Grades: 10-12 A Level

Prerequisite: Ceramics (approval from teacher)



Students will build upon skills developed in Ceramics to explore various aspects of sculpture; additive, subtractive and relief techniques. Materials may include: wire, clay, wood, plaster, paper maché, cardboard and found objects. Assignments will build upon the elements and principles of art as they relate to sculpture. A materials fee may be assessed.

### Studio I

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective      Full Year      Grades: 10-12      A Level

Prerequisite: Art Foundations or Art Intro with Drawing or Painting

Students will begin to create works for a portfolio and should have a strong interest in art. They will explore self-expression and various media in depth in a series of guided and open-ended assignments. Artists and art movements will be explored. Some out of class work is required.

### Studio II: Honors Portfolio

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective      Full Year      Grades: 11-12      Honors

Prerequisite: Studio I and portfolio assessment by department faculty and director. Summer work required.

Students will continue to create a portfolio that will meet college entrance requirements in a more individual series of guided and open-ended assignments. Individual style, originality and expertise in media use are stressed. Students are evaluated using the Boston Globe Scholastic Art and the Advanced Placement rubrics. Students interested in Advanced Placement will develop works for the AP breadth requirement. Outside work is required in order to be successful. *Summer assignments are required.*

### Studio III: Honors Portfolio

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective      Full Year      Grade: 12      Honors

Prerequisite: Studio II and portfolio assessment by the department faculty and director. Summer assignments required.

Students must be able to work independently in a series of assignments that are tailored to their interests and strengths. Individual style, originality and expertise in media use are stressed. Students are evaluated using the Boston Globe Scholastic Art and the Advanced Placement rubrics. Students will be able to complete the requirements for a college portfolio including slides. Outside work is required in order to be successful. Students will create a power point presentation and will display their work at the Arts Festival in May as part of their class assessment. Students must be prepared to work outside of class. *Summer assignments are required.*

### Advanced Placement Studio

*Meets Expectations for Student Learning: 1,3,4,6,7,8,9*

Elective      Full Year      Grade: 12      Advanced Placement

Prerequisite: Studio II and portfolio assessment by the department faculty and director. Summer assignments required.

Students focus on the concentration aspect of the AP Portfolio as well as fine tune their breath section. Students must be able to work at a demanding pace, to meet deadlines and to work outside of class. Students must be able to work independently. Individual style, originality and expertise in media use are stressed. Students are evaluated using the Boston Globe Scholastic Art and the Advanced Placement rubrics. They are required to submit the Portfolio in May. Students will also be able to complete the work needed for a college portfolio including slides. A fee for slides is assessed. Students will create a power point presentation and will display their work at the Arts Festival in May as part of their class assessment. Students must be prepared to work outside of class. *Summer assignments are required.*